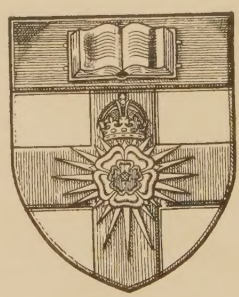


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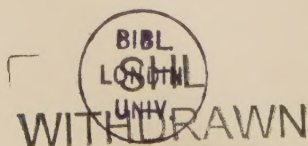


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EARLY EUBOEAN POTTERY AND HISTORY

(PLATES 1-7)

THIS paper is divided into three sections. In the first a group of pottery fragments from Chalcis serves as an introduction to a study of early Euboean pottery, and of its appearance and imitation in other parts of the Greek world. In the second some archaic and black-figured vases are published as *addenda* to my article on 'Pottery from Eretria' in *BSA* xlvii. 1-48, plates 1-14. This I refer to here simply as *Eretria*. Finally some historical considerations are prompted by the archaeological evidence reviewed. Briefly they involve the following theses: that Strabo's 'Old Eretria' may lie at or near Amarynthos at the distance from Eretria that Strabo indicated; that Euboeans played a major part in the foundation of Al Mina (Posideion) on the North Syrian coast in the early eighth century B.C.; that they may be largely responsible for the adoption of the Semitic alphabetic characters for the Greek language; and that Eretria was the ultimate victor in the 'Lelantine War'.

Mme Semni Karouzou has with customary generosity granted me permission to publish several vases in the National Museum, Athens. Other pieces in the Louvre, the British Museum, and the Ashmolean Museum are illustrated by permission of the authorities of those museums. Mrs. A. D. Ure has been particularly helpful in the study of the black-figured vases and is herself preparing a study of a series closely related to the Euboean vases which are discussed here.

I. CHALCIS

Chalcis remains the only early Greek city of major importance which has never been excavated.¹ Chance finds, mainly from tombs, give some indication of her ceramic history and there have been some controlled excavations in the nearby cemeteries. But the city remains untouched. The acropolis of the classical and Hellenistic city lies on a suitably steep-sided hill beside the straits of Euripos south of the medieval and modern town. The circuit of its wall can readily be traced on an air photograph, and its harbour possibly lay in the cove just north-west of the acropolis, where there are faint traces of an ancient mole. In all probability then the lower town lay on this side of the acropolis, to the north; indeed there is no room to the south or east, where hills shut off the acropolis from the Lelantine plain, which is reached easily by the coast road. Recent widening of the modern road some half a kilometre north of the lower slopes of the acropolis has cut through part of a heavy ashlar wall, and it is not impossible that this represents part of a city circuit embracing the harbour. The ancient bridges across the straits may have stood at the end of the small promontory immediately north of the presumed ancient harbour, and not where the modern bridge stands; but this is not the place for any detailed speculation on the topography of Chalcis, which urgently requires further study. The only finds in the area of the modern town have been of tombs.

To the north of the acropolis and just to the west of a preserved (and restored) stretch of the Venetian aqueduct stands a low hill at what might well have been an extremity of the lower town. A modern quarry has thrown back much of its surface soil and exposed various antiquities. The site was, I believe, first explored by Mrs. V. Hankey a few years before the last

¹ For a summary of evidence about the ancient city see *IG* xii. 9, 165 f.; F. Geyer, *Topographie und Geschichte der Insel Euböia* 33 ff.

war, and visited on various occasions by the late T. J. Dunbabin and, since the war, by myself.² The result of these sundry visits is a collection of sherds now in the British School of Archaeology at Athens, a selection of which is published here. As they represent the widest range of pottery yet recovered from Chalcis, they are of no little importance in giving a picture of the archaeology of a city which was for a time a major power in Greece and the source of the earliest Greek colonies overseas. A controlled excavation in the area in which they were found would no doubt render the present study obsolete. Until such excavation is undertaken the following remarks may help to fill a serious gap.

Before describing the pottery a few remarks about the site should be made. Visible antiquities which have been exposed by the quarrying include walls, apparently of houses, as well as one stretch of heavy foundations and squared poros blocks for a building of some importance. One well was also noted. Precise dates for these structures could not be determined, but they are not likely to be earlier than the fourth century B.C. Two or three tile graves seem to represent the latest phase of the site and may be Roman. The tiles are crude and finger-scored in the late Hellenistic and Roman fashion. An Ionic column-base in poros lies on the site, and a marble cornice block (2.05 m. × 0.80 m. × 0.30 m.) with lion-head spouts had been removed a short distance. Just west of the quarry site, on the lower slopes of the acropolis, are traces of house walls and a concentration of Hellenistic sherds.

The Earliest Pottery

Much of the archaic and Geometric pottery is probably of local, at least Euboean manufacture, and shows a fair uniformity of fabric exactly similar to that met at Eretria;³ it is generally pale, more buff or pink than orange, rather soft in the break, with rare white inclusions and usually no mica. It is paler and finer than most Boeotian fabrics, much paler than sixth-century Attic, and unlike any certainly Cycladic fabric known to me. Save for imports and exceptions noted below, this description may be held to cover all the fragments published here. On earlier vases the paint is generally poor and never a good black; it is also fugitive, especially where it overlies the slip, which varies from a chalky pale cream to a heavy, slightly glossy cream. The fragments discussed are illustrated on PLATE I and are referred to here simply by the numbers which accompany the illustrations.

Fragments decorated in a Protogeometric style are not uncommon. From the shoulder of a closed vase comes **3**, bearing concentric semicircles above a painted area, as on a fragment from Eretria.⁴ Other scraps bear parts of complete concentric circles from open vases, presumably skyphoi derived from the Attic type.⁵ **1**, **2**, **4**, and **5** are from the familiar small skyphoi with pendent semicircles which have been found on many Greek and Near Eastern sites, and whose latest examples can certainly be dated as late as the eighth century.⁶ The class is known in Euboea at Eretria⁷ and Kerinthos,⁸ and there will be more to say of it later. Desborough

² Briefly mentioned in *BSA* xlvii (1952) 12, n. 73. War-time exploration in Chalcis is reported in *AA* 1942, 140 and *JHS* lxiv (1944) 90.

³ For the Mycenaean pottery of Chalcis see V. Hankey, *BSA* xlvii (1952) 49–95. She mentions Protogeometric and Geometric sherds from the Vromousa cemetery north-east of Chalcis (*ibid.* 51, 76 ff., nn. 54–58) which I have not seen. Early pottery has been found in other sites in Euboea, but nothing important has yet been published (cf. *PAE* 1941–4, 39; *AA* 1943, 309).

⁴ *Eretria* 8, fig. 136; V. R. d'A. Desborough, *Protogeometric Pottery* (hereafter *PGP*) 199.

⁵ Cf. the fragment from Eretria, *PAE* 1952, 159, fig. 4, 2, and the class described in *PGP* 194 f.

⁶ *PGP* 180–94. ⁷ *Eretria* pl. 1, A 18; *PGP* 199.

⁸ Sherds in the British School at Athens include two fragments of skyphoi with concentric semicircles; on one they are pendent and the type seems to be that of the other fragments mentioned here, though the fabric is somewhat coarser and more brown; on the second they apparently rise from the painted lower part of the wall. There are also Geometric or archaic scraps from the same site. For Kerinthos see Geyer, *op. cit.* 96–98; L. Pernier, *Ann* iii (1916–20) 273–6.

describes a group of jugs and small amphorae⁹ in Chalcis Museum. They were found near Arethusa, the brackish spring near the sea immediately south of the ancient acropolis.¹⁰

Fragments of Late Geometric and Subgeometric skyphoi and kantharoi are for the most part covered with a cream slip (**18–23**) though some, apparently of the same fabric, lack this ground (**10**, **12–16**). All bear decoration ultimately derived from Protocorinthian, though probably more immediately related to Cycladic, in which slipped cups of this type are most common; similar types were found at Eretria,¹¹ where only the fabric serves to distinguish Euboean from Cycladic. For the full depth of the lip inside there are reserved lines; on **20**, lines painted in white, and on **18** a reserved band deep within the bowl. There are some which imitate Protocorinthian more directly (**9**, **11**: kotylai). They lack the slip which characterizes the more plausible imitations found at Eretria,¹² but there too the unslipped imitations are very common; one kotyle fragment (**8**) bears a white-painted star beneath reserved lines.¹³ Other white-painted decoration appears unusually in the form of a wheel on the inside of a skyphos fragment with lightly everted rim (**27**); the outside of the vase was slipped and painted over but for two reserved lines near the rim. The wheel is a common Geometric motif, but its position here is striking, and one is reminded that the wheel appears as a Chalcidian blazon on the reverse of her earliest coins. **26** (both sides are illustrated) is from a slipped skyphos of the type found in considerable numbers in Eretria; on these there will be more to say below; characteristic is the white-painted decoration both inside and outside the cup. **25** is slipped and may come from a cup of the same class, while other scraps from Chalcis with white-painted lines on the exterior should perhaps be associated also. **6** is from a bowl of grey-pink, slightly micaceous fabric, a type common on Samos and perhaps made there.¹⁴ Other possible imports are attested by fragments of cups with linear decoration, like Ionian bowls but bearing a light slip, and the foot of a Protocorinthian kotyle.

There are many fragments from larger open bowls and craters, and almost all are slipped (**30–36**). A purely Geometric fragment (**32**) is painted on a whitish slip and figures a bird with a drooping tail before the leg of a horse; in front of the bird is another hoof tilted forward, either of the same animal or of another in motion. The hatching on the bird's body and in the lozenges below is executed with deliberately thinned paint. This is a peculiarity shared by some imitations of Protocorinthian from Eretria,¹⁵ but otherwise it occurs only on Chian pottery in this period. The fragment is only 0.45 cm. thick, but almost flat, and must be from an unusually large and thin-walled crater; of its style little can be said, though the lumpy hoofs suggest Cycladic rather than Attic parallels. The fabric is appreciably redder than that of the other fragments, but was fired very hard, and might still be Euboean. **30** is from a large bowl rather than a crater, as there is no heavy moulding at the lip. The crater fragment **31** bears linked blobs reminiscent of the running spiral ornament which is met in Attic, but especially affected in Boeotia and the Cyclades; this again may be local, and, like **30** and other early fragments, it has a hard greyish-pink fabric. **35** bears the type of decoration met more often on cups, and **36** the upright wavy lines so common at Eretria and in Boeotia. **33** and **34** carry somewhat chaotic decoration, which might be inspired by the rougher drawing of Subgeometric Boeotian, and which has much of the character of the presumed Aeolic styles in the seventh century. We may compare also fragments from Skyros, an early dependency of Chalcis.¹⁶ The lip of **41** (FIG. 1)

⁹ PGP 199.

¹⁰ See Geyer, op. cit. 35, and the map in *RE* s.v. Chalkis, 2079.

¹¹ Eretria 2 f., figs. 3, 5; pl. 1, A 9–16, 22–24, B 1–9.

¹² Eretria 2, pl. 1, A 1–2, and see below.

¹³ Cf. Eretria 2 f., fig. 1, 10.

¹⁴ Cf. Eretria 12; *AM* lviii (1933) 68 f.

¹⁵ Eretria 2.

¹⁶ *ADelt* iv (1918), παραρτ. 39, fig. 7, 11. H. Hansen reports more Geometric in Skyros (*Studies presented to D. M. Robinson* i. 63). The island is said to have been settled by Chalcidians, Ps.-Skymnos 579–86.

is slipped, and on the body appears part of the decoration of concentric circles in white, met in many Late Geometric and Subgeometric wares. **42** and **43** (FIG. 1) are respectively slipped and unslipped examples of the type of dinos or crater found in Eretria,¹⁷ where these vases often bear white-painted decoration on the lip or lower body. **38** has no slip, and figures a row of Late Geometric birds in imitation of Protocorinthian. Other fragments from the slipped walls of craters and bowls are decorated with horizontal stripes, and one shows that the area beneath the horizontal handle was not slipped.

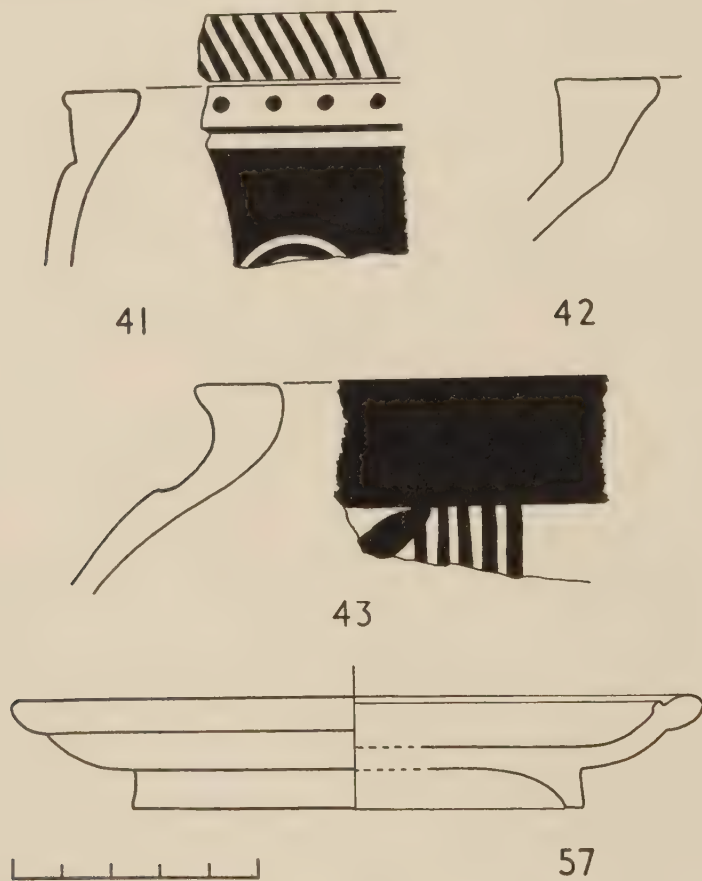


FIG. 1. FRAGMENTS FROM CHALCIS

From larger closed vases without slip come fragments with typical Late Geometric patterns of wavy lines, linked blobs (**39-40**), and rays. **37** is from the trefoil lip of an oenochoe and carries a pale cream slip. Body fragments from similar jugs or small amphorae bear neat and narrow horizontal stripes and are most of them also slipped.

These sherds afford slight enough evidence for the Geometric pottery of Chalcis, but they do permit some broad generalizations. On the whole the range is very similar to that met at Eretria. Unslipped Late Geometric pottery of Attic type occurs beside slipped wares which are closer to those familiar in the Cyclades. The plainer small vases imitate Protocorinthian in exactly the same way as do Cycladic, and it is now clear that, so far as the decoration goes, the

¹⁷ *Eretria* 7 f., fig. 9; pl. 2, B 6, 7, 14-18. Cf. Hankey, *op. cit.* 83, n. 57.

general run of small vases in use in Euboea and the Cyclades in the later Geometric period are distinguishable only by fabric.

Of the other pottery it is significant that two classes are represented which, on earlier evidence, have seemed purely Eretrian. These are, first, the skyphoi with slip-filled geometric patterns, and, secondly, the dinoi with wavy and straight linear decoration and occasional added white. At Chalcis we have only scraps, but enough to show that these wares are better now called Euboean than specifically Eretrian. The Chalcis fragments could of course have come from Eretria, or both could have been supplied by the same potteries, probably in the Lelantine plain, where there is good potter's clay. Only one sherd so far attests the motif of upright wavy lines so characteristic of Eretria, but the cemeteries of Chalcis have yet to yield the grave-amphorae to compare with those which archaeologists have recovered from Eretria, and dealers from Boeotia. Pending such a discovery it is reasonable to suppose that the Late Geometric Chalcidian grave-amphora was not very unlike the earliest of the Eretrian series,¹⁸ with perhaps some concessions to the proximity of Boeotia, whose various styles are fairly well known.¹⁹

Working from these surmises and conclusions, and in part to confirm them, we should consider finds in those parts of the Greek world in which Chalcidian or Euboean exports or influence might reasonably be expected. For exports we are obliged to confine ourselves to the known Euboean wares, still best represented at Eretria. So far as I know, nothing Geometric found in Boeotia can yet be proved certainly Euboean in origin, though Chalcis and Eretria must have had considerable influence, if not dominion, in the parts of the mainland opposite. The only undoubted Euboean pottery which has so far been found outside Euboea appears in a quarter in which one might least expect it. The now-familiar Euboean Late Geometric skyphoi with slip-filled patterns are represented by sherds found in Sir Leonard Woolley's excavations at Al Mina (Posideion) in North Syria. Hitherto unpublished examples, now in Oxford, are illustrated here in PLATE 2 a.²⁰ (a) has the regular slip-filled decoration characteristic of many skyphoi found at Eretria and now known at Chalcis. In (b) and (c) the slip overlies only the lip of the vase, as on many Eretrian examples. (d) is included here more for its straight-lipped profile, so common at Eretria, than its decoration; all the outside of the vase was slipped, and the decoration of circles and dashes added in a metallic brown paint.²¹

Al Mina was a Greek trading port at the mouth of the Orontes, established some time in the eighth century B.C. So far as dates can be given to these Euboean fragments found there, we should expect them, on grounds of style, to belong to the years around 700 B.C., a time when Al Mina was under heavy Cypriot influence and, with Cyprus, temporarily part of the Assyrian empire.²² The stratigraphy of the pieces is no help, and we cannot place great faith in stylistic

¹⁸ Groups A and B *Eretria* 16 ff.

¹⁹ To the group I compiled in *Eretria* 17, n. 80 add an example in Heidelberg (known to me from a photograph in the German Institute at Athens). Ibid. no. 9 is now Athens NM 18553.

²⁰ (a) 1954.516; cream-white, the wavy lines on lip and lower body and in the lozenges; a dull reddish stripe below the handle-zone; within, two reserved lines in the lip over slip.

(b) 1954.520.7; within, two reserved lines in the lip over slip, one over the clay ground.

(c) 1954.391.5; within, four thin reserved lines in the lip.

(d) 1954.520.6; within, one reserved line in the lip over slip, one over the clay ground; a groove below the handle-zone; for the profile cf. *Eretria* 5, fig. 6, 4 and 6 (the figures are misnumbered).

There are other Euboean fragments from Al Mina in the

London Institute of Archaeology. I am indebted to Miss J. du Plat Taylor for the opportunity to study them. 55.1827 is from a cup with the characteristic dotted oval filled by a cream line (as *Eretria* pl. 1, B 20, 21, 23, 27; *PAE* 1952, 162, fig. 10), and there are two fragments from the lip of a cup with a white wavy line outside and reserved lines showing the cream slip within. In Cambridge is a fragment decorated as PLATE 2 a, (a) (*Mus. Class. Arch.* AL 241).

²¹ But cf. *PAE* 1952, 161, fig. 9 right. For (c) cf. *AJ* xvii (1937), pl. 14, 1 centre right (Al Mina: Oxford 1954.392.2), and *Eretria* pl. 1, B 17.

²² There is a group of locally-produced cups from Al Mina of this period which combine Cypriot and Euboeo-Cycladic decoration and technique. The dating of the 'Cypriot' Level 8 at Al Mina is problematic. Many of the earliest Greek sherds are labelled Level 8, and it may be that the earliest levels are too confused for any particular groups

dates which might as well be too low as too high. The paucity of the certain Euboean material beside the mass of other Greek pottery suggests that Euboean interest in Al Mina might only be a passing one, perhaps of an individual trader or family. But the presence of at least a little Euboean pottery at Al Mina does raise another important question. How much Euboean is there from the site which has hitherto passed as Cycladic? In the smaller vases the Cycladic and Euboean are indistinguishable so far as decoration goes. The Delos Geometric group Ae,²³ which provides the closest parallels, is broadly divisible by fabric and decoration into a Parian and Naxian class.²⁴ The presence of mica in varying quantities is common in vases of both these Cycladic groups; more common than the Delos publication suggests. Euboean clay has no mica, or at best only a little. Of the Al Mina 'Cycladic' sherds only very few are micaceous, and those that are might as justly be called East Greek, for the small vases with metope decoration were also made in Rhodes and Ionia.²⁵ Finally we may add the fact that few examples of the large vases which identify the main Cycladic groups of the eighth and seventh centuries have been found at Al Mina^{25a} (or in the west for that matter). Only the smaller vases—mainly skyphoi, or imitations of them—have been recorded, and for these we have found an alternative explanation.

Another class which deserves note in this context is that of the imitations of Protocorinthian kotylai with wire-bird friezes, which are as prolific at Al Mina as at Eretria.²⁶ They are not micaceous, and in the Cyclades they are virtually unknown.²⁷ I illustrate a selection of the fragments from Al Mina now in Oxford on PLATE 2 *b*.²⁸ All are from kotylai, except for (b), which is from a cup with everted rim. The double row of birds on (a) is unusual. The painting is, on the whole, hasty and inaccurate, and at Al Mina the birds are all of the lumpy two-legged variety. As at Eretria, there are fragments which have a cream slip²⁹ and are better painted, giving a more plausible imitation of Protocorinthian. The lower part of the kotylai is generally dark, though there are some with rays which probably belong to the early seventh century. An interesting feature is the presence of white lines within the lips of most of the kotylai. Such lines are found on Protocorinthian kotylai only on the black vases which have white-painted decoration in their handle-zones, and not on the ordinary kotylai, although by the Early Corinthian period at the end of the seventh century the distinction is no longer observed.³⁰

of vases to be attributed safely to a phase associated with the Assyrian occupation of Al Mina at the end of the eighth century.

²³ *EADelos* xv, pls. 27–32 *passim*.

²⁴ Cf. *Eretria* 2, n. 8.

²⁵ e.g. Samos (*AM* lviii (1933), Beil. 20–22 *passim*) and Chios.

^{25a} Mr. R. M. Cook has drawn my attention to three fragments in Cambridge (Mus. Class. Arch. AL 238–40) closely akin to Delos Geometric group Ad. These are of the early seventh century.

²⁶ C. M. Robertson, *JHS* lx (1940) 18 f., fig. 8*b–c*, and many fragments in Oxford (see below); *Eretria* 2 f., fig. 1, 6–9 and 11; pl. 1, A 6–7; cf. pl. 3, A 21.

²⁷ Cf. the skyphos, *EADelos* xv, pl. 31, Ae 93, 'tout à fait exceptionnel dans notre série'. Also the kotyle with birds in Thera, *AM* xxviii (1930), Beil. 32, 5. Attic imitations seldom have the rows of wire-birds, are better executed, and never slipped, cf. R. S. Young, *Hesp* Suppl. ii. 146 ff. Dr. G. Buchner tells me that this type of imitation of Protocorinthian is most common in the early graves of the Euboean colony Pithekoussai, but in a local fabric. The wealth of pendent-semicircle skyphoi on Delos (Rheneia) and dearth of these kotylai, both of them classes we have reason to

believe Euboean, may be significant. Euboean influence and interest in Delos and other islands of the Cyclades may well have lessened considerably towards the end of the eighth century.

²⁸ (a) 1954.427 (Level 8); two white lines within the lip.

(b) 1954.431; a white line within the lip and a reserved band lower in the bowl.

(c) 1954.426.15; three white lines within the lip; a paler, buff fabric, more like Protocorinthian.

(d) 1954.426.3; three white lines within the lip.

(e) 1954.418.5 (Levels 6–7).

(f) 1954.426.7 (Levels 6–7); two white lines within the lip. Other patterns on lip fragments include butterfly ornament and hatched maeander hooks. Some fragments have isolated white lines also lower in the bowl, and white lines over the black at the base of the wall.

²⁹ *Eretria* 2, pl. 1, A 1–2. Cf., from Al Mina, Oxford 1954.419.2, and Robertson, *op. cit.* 19, fig. 8*d*.

³⁰ On Protocorinthian kotylai, e.g. S. Weinberg, *Corinth* vii. 1, 40, nos. 162–3; 49, no. 176, and cf. 67, nos. 261–77. Oxford 1954.455, from Al Mina, imitates such kotylai, with a dotted circle (freehand) in the handle-zone, a line below and a line within the lip, and rays at the base.

Attic imitations of Protocorinthian kotylai do not exhibit this peculiarity, but it does appear on some of the slipped imitations found at Eretria,³¹ where white was also used regularly in the interior of the characteristic Euboean cups which have already been discussed, and in the subsidiary decoration of the grave-amphorae. At Chalcis we may note the use of white in the cup fragments 20, 26, and 27 above. This then is a feature which might prove of great value in the identification of Euboean vases of this type elsewhere in the Greek world. It certainly considerably strengthens the case for attributing a large class of vases at Al Mina to a Euboean workshop.

At the risk of seeming too enthusiastic in arrogating early Greek wares for Euboea I would further submit that the island should be considered a major source for the manufacture and distribution of the skyphoi decorated with pendent semicircles which are found at Al Mina and are widely distributed around the Aegean. So far as Al Mina is concerned, it would simply involve an extension backwards in time of the appearance of Euboean interests there, in fact to the earliest days of the Greek settlement.³² This again would be at the expense of the suggested Cycladic interest. But more must be done to justify the claim that Euboea was largely responsible for the dissemination of this important class of pottery. Fragments have been found in the island so far in three places, Chalcis, Eretria, and Kerinthos;³³ a fair record, considering that only one of these sites has so far been excavated. The class in general and its style of decoration have been called, after the main provenances, Thessalo-Cycladic.³⁴ 'Thessalo-Cycladic' makes an uneasy geographical and cultural compound. Euboea fills the gap and provides the link. Influence from the Cyclades on the pottery of Thessaly, or vice versa, is not easy to understand; the influence of Euboea in both directions would be almost inevitable, and there is literary evidence enough for Euboeo-Thessalian relations in early times. The north Cyclades are cited as the probable source for much of the class, and important finds have been made on Tenos, thought by Buschor to be the main source,³⁵ as well as on Delos (Rheneia), which always attracted island wares, and Andros and Paros. Eretria, Strabo reminds us,³⁶ ruled over Andros, Tenos, Keos, and other islands, and many have thought this to refer to the eighth century. Skyros, where other important finds of the skyphoi have been made, was always in the Chalcidian sphere of influence. Finally, later Cycladic wares are usually micaceous; the pendent-semicircle skyphoi are generally not, nor are Euboean vases. Desborough remarks on the absence of the class in the western Greek colonies, where the Euboean states led Greek enterprise.³⁷ This can be taken as a valuable chronological factor, for it suggests that the ware was no longer current when the first western colonies were established.³⁸ The traditional dates for the earliest of them, Cumae and Pithekoussai, are impossibly high, and they could hardly have been founded long before the other western colonies, though still in the first half of the eighth century;³⁹ this rather suggests that the skyphoi did not survive in common use to the middle of

³¹ Three white lines within the lip of Eretria pl. 1, A 1, and an isolated line lower in the bowl of a similar kotyle. I do not know how commonly the lines appear on the other kotylai from Eretria.

³² The stories of the foundation of Posideion by Amphilochos belong, with those of Mopsos, to the period of the Late Mycenaean ventures in the east. For Mycenaean at Alalakh and Sabouni see C. E. Woolley, *Alalakh* 369 ff., *A Forgotten Kingdom* 178 f., *JHS* lxviii (1948) 148. Woolley has suggested that the earliest years of Al Mina's history have been lost with the washing away of part of the site; but, although there might have been a Mycenaean port serving Alalakh somewhere near Al Mina, there is no scrap of evidence from Al Mina, Sabouni, or Alalakh, or for that matter

from any Near Eastern site other than those on the Asia Minor coast, for Greek imports or occupation in the period immediately prior to that of the pendent-semicircle skyphoi.

³³ See above, p. 2 and n. 8.

³⁴ Desborough has given us an exhaustive study of the vases in *PGP* 180-94. Chalcis and Kerinthos in Euboea may be added to the list of provenances, and Emporio in Chios.

³⁵ *AM* liv (1929) 159.

³⁶ x. 448.

³⁷ *PGP* 194.

³⁸ T. J. Dunbabin suggested this in *The Greeks and their Eastern Neighbours* (*JHS* Suppl. Paper 8) 30.

³⁹ Cf. T. J. Dunbabin, *The Western Greeks* 445 f.

the eighth century, except perhaps in some remoter or local factories. It would seem likely then that a date towards the beginning of the eighth century is to be preferred for the Greek foundation at Al Mina. The reluctance of classical archaeologists to accept such an early date seems over-cautious.⁴⁰

To some scholars much higher dates for the pendent-semicircle skyphoi have seemed feasible. A fragment of one found at Tell Abu Hawam in a level dated by the excavator to 926 B.C. has been held to be the only fixed point for the dating of Greek pottery between the fall of Mycenae and the foundation of the Sicilian colonies.⁴¹ Unfortunately the date of the level at Tell Abu Hawam has been much disputed.⁴² Perhaps it is time to reverse the arguments. At Al Mina, where these skyphoi have been found in quantity and with a comparable amount of later pottery, we have no reason to suspect a hiatus between them and the other Geometric vases. In the Rheneia Purification Pit too our skyphoi must have their immediate descendants and part-contemporaries in the Geometric skyphoi of group Ae. From the apparent date of the Geometric vases which succeed the skyphoi on these sites, and with the evidence of their absence in the west, their *floruit* would seem to be in the first half of the eighth century, and I suppose that they may have been made also at the end of the ninth. That they might have been made virtually unchanged for up to 200 years seems to me impossible. If the Tell Abu Hawam example is intimately associated with a destruction level, that level can hardly be dated much before 800 B.C.,⁴³ but one sherd is too little on which to base detailed arguments, and Tell Abu Hawam had perhaps better be forgotten for the purposes of dating Greek pottery.

At the other end of the scale the skyphoi are now reported at Tarsus in levels immediately preceding the destruction of the site by the Assyrians in 696 B.C., and Hanfmann believes that they only stopped being imported at Tarsus in about 700.⁴⁴ Only preliminary reports on the pottery are as yet available, and it remains to be seen whether the skyphoi appear complete on destruction floors (which would be decisive), or in destruction rubbish (which would not). The evidence against their survival so late is only circumstantial, but it is strong. Further on the chronology of the period I have only to remark that an unfortunate misprint in a preliminary report on Al Mina has been the starting-point of at least one serious attempt to upset traditional Greek vase chronology, and might yet be the source of others.⁴⁵

The presence of these vases at Al Mina and other eastern sites suggests that the Euboeans and islanders looked to the riches of the east before they sought the corn lands of Italy and Sicily.

⁴⁰ On the other hand K. R. Maxwell-Hyslop's 'by 800 B.C., and possibly earlier' (*Iraq* xviii (1956) 166) has no warrant; cf. Robertson, *JHS* lx (1940) 21.

⁴¹ Discussed by Desborough, *op. cit.* 182, 294.

⁴² G. W. Van Beek, *BASOR* cxxxviii (1955) 34-38; P. J. Riis, *Hama* ii. 3, 113 f.

⁴³ This would entail drastic changes in the admittedly insecure dating of Cypriot pottery in this period.

⁴⁴ G. M. A. Hanfmann in *The Aegean and the Near East* (*Studies presented to Hetty Goldman*) 173-5, and cf. *Harvard Studies in Classical Philology* xli (1953) 30. W. F. Albright reaffirms confidence in an early date for the skyphoi, the Tell Abu Hawam level, and Greek vase chronology in *The Aegean and the Near East* 163, n. 68. If the fragment *Larisa am Hermos* iii, pl. 57, 4 (cf. *PGP* 193, 221) is the earliest Greek pottery on that site, it should have arrived quite late in the eighth century, although it might have come at any time during the period of native occupation which preceded the Aeolic settlement. It should be remembered that, inasmuch as the pendent-semicircle skyphoi do not fit very tidily into the clear sequence of Protogeometric and

Geometric Greek pottery, their dating has no very great relevance to general chronology, whatever its interest in particular contexts. See also now Desborough in *JHS* lxxvii (1957) 216-19.

⁴⁵ *AJ* xvii (1937), pl. 14, 1 is labelled Levels 5-7, i.e. seventh century and later; this applies only to the sherds illustrated in the lower half of this block, but it also applies to all the sherds illustrated *ibid.* pl. 14, 2 and labelled as of Levels 8-10, i.e. eighth century. The latter heading applies only to the sherds in the upper half of *ibid.* pl. 14, 1 (with one exception: the duck). This can be verified from C. M. Robertson's publication in *JHS* lx (1940) 2 ff. and I have been able to check many of the sherds illustrated in *AJ* from such of the originals as are now in Oxford. The drawings, with their misleading captions (and upside down), were reproduced by G. Sâflund in *SE* xii (1938), pl. 5, and some of them appear in C. L. Woolley, *A Forgotten Kingdom* pls. 19b, 20a. It is, apparently, this confusion which has led Sâflund to down-date Protocorinthian and much else by nearly a century; see *Historia* vi (1957) 16-18.

It was no doubt the growing power of Assyria as well as their western and domestic commitments which dissuaded them from pursuing this eastern venture, left now to the initiative of their East Greek allies, but they had by then reawakened Greece to cultures which were profoundly to influence the development of Greek art and thought.

Further pursuit of Euboean in the east is as yet fruitless.⁴⁶ The Euboeans (Abantes) who travelled eastwards at the time of the Ionian Migration might have done so in late Protogeometric times. They went to Chios, where a pendent-semicircle skyphos has now been found (at Emporio, unpublished; n. 34). But this is little enough to argue from.

In the west, on the other hand, where the Euboean states were the first to send colonies, we might reasonably expect to find something distinctively Euboean. No certain exports can be identified, but the Geometric pottery from Etruria and from the Euboean and other Greek colonies is not inconsiderable, and should reveal something. The pottery has been studied already, largely by Blakeway⁴⁷ and Åkerström,⁴⁸ and the homeland Greek traits have been distinguished in the western vases. Specific Euboean influence has not generally been admitted with confidence because the home fabrics were too little known,⁴⁹ but parallels were drawn with Boeotian vases, close cousins of the Euboean. There is of course no reason to look for much Boeotian influence in the west,⁵⁰ and these similarities must therefore be attributed wholly to Euboean influence.⁵¹ The same may well be true of the vases decorated in what has been declared a 'Cycladic' or 'Euboeo-Cycladic' manner, and for the smaller vases much the same arguments can be applied as those used above for the Al Mina finds, notably the absence of examples of the most distinctive Cycladic groups.⁵² Evidence for the participation of the Cyclades in the early colonization of the west is slight⁵³ and we may not be far wrong in reading 'Euboean' for 'Cycladic' in many instances in which the latter term has been applied in the west. The position of Euboea as a partner or middleman in the Boeotia-Cyclades bloc is a factor in the archaeology of archaic Greece which has been little appreciated. In many ways the chain Boeotia-Euboea-Cyclades can be regarded as an archaeological unit in the Geometric and archaic periods. Regional differences are not strong enough to impair the distinctive character of the trio.⁵⁴

There are other more specific instances of what seems to be Euboean influence in the west which can be cited, though unfortunately little enough as yet from the Euboean colonies themselves.⁵⁵ Important Late Geometric vases have recently been found at the Chalcidian colony⁵⁶

⁴⁶ There is one vase in Samos which seems out of place and could perhaps be Euboean. It is the footed crater, *AA* 1937, 207 f., fig. 2. The foot is distinctive, but it is found in other wares (Rhodian geometric, A. Rumpf, *MuZ* pl. 2, 5; Thera, E. Buschor, *Griechische Vasen* 59 f., figs. 69, 71; Argive, *Perachora* i. 65 f., pl. 12, 5; Corinthian, *Hesp* xvii (1948), pl. 77, C 25). In general the type with cylindrical upper part and flaring toe is met in various fabrics including Eretrian (*AE* 1903, 18, fig. 10, and cf. *CVA* Cambridge ii, pl. 494, 7-8; *Eretria* 19, pl. 4; J. D. Beazley, *Development* 6—as Attic; that the lid belongs is proved by the use of the same multiple brush on it and the body of the vase).

⁴⁷ *BSA* xxxiii (1932-3) 170-208; *JRS* xxv (1935) 129-49.

⁴⁸ A. Åkerström, *Der geometrische Stil in Italien* (1943), on which see Dunbabin, *JRS* xxxix (1949) 137-41 and *The Western Greeks* 466-70; R. M. Cook, *JHS* lxxv (1945) 119 f. J. Bérard, *La Colonisation grecque* (1957) 278 ff., reviews later archaeological finds in the west.

⁴⁹ Blakeway, op. cit. 183, n. 4, hazarded a guess which has much to recommend it.

⁵⁰ Slight at Metapontion, see Dunbabin, *The Western*

Greeks 33, and cf. Bérard, op. cit. 49, 67. ⁵¹ Cf. *Eretria* 17.

⁵² For the Cumae jug, which has been thought Cycladic, see J. K. Brock, *BSA* xlv (1949) 78. It is clearly akin to Cycladic, but it cannot be readily assigned to any known class. Now that we are beginning to learn more of local seventh-century workshops in the west (especially in Sicily), the likelihood of its being of western manufacture becomes even more attractive.

⁵³ Naxians probably participated in Sicilian Naxos. Andros falls within the Euboean sphere.

⁵⁴ This is a subject to which I hope to return in detail. Relations in the Bronze Age may also have been close; note the Euboean finds of 'frying-pans' of Cycladic type, G. E. Mylonas, *AJA* xxxviii (1934) 272-4.

⁵⁵ Finds of early pottery on Corcyra may prove enlightening, cf. *JHS* lxxvi (1956), Suppl. 20, fig. 17, *Tò ἔργον τῆς Ἀρχαιολογικῆς Ἑταιρείας* 1956, 69 f. Robertson noted 'Cycladic' influence on some Ithacan vases and cites a Euboean cup from Eretria as a parallel, *BSA* xliii (1948) 65.

⁵⁶ G. Buchner, *RM* lx/lxi (1953-4) 37-55, pls. 14-17; *Atti e Memorie della Società Magna Grecia* 1954, pl. 4.

of Pithekoussai (Ischia). They are standed craters with unusually high feet, and lacking the high neck characteristic of most Boeotian and Euboean grave-amphorae. Details of their decoration recall Euboea, but no more than that.⁵⁷ Either this local school had deviated not a little from the homeland styles, or we are due for a surprise when a Late Geometric cemetery at Chalcis is excavated. Cumae, on the mainland opposite, and, after Pithekoussai, the earliest of the western colonies, has little to offer in this style.⁵⁸ There are two early cups from Cumae which have been called Cycladic and might, by the same token, be Euboean; and they need not antedate the foundation of the Greek colony there, or at least that of Pithekoussai.⁵⁹

It is in Etruria that we find the most striking imitations of what we now know as Euboean.⁶⁰ In a find of vases at Vulci, now in Berlin, are three grave-amphorae with high necks and feet.⁶¹ They have been often illustrated and discussed. Payne declared them Boeotian or Cycladic, and the vaguer title 'Euboeco-Cycladic' has also been assigned to them. Åkerström pointed out that they were not imported, but made locally, though certainly by Greeks. The principle of decoration of these vases and their general outline⁶² unquestionably point to Boeotia and Euboea. Boeotia, as we have seen, has little to do in the west, but as the Etruscans must have learned much of the Greeks via the nearest Greek colonies, which were the Euboean Cumae and Pithekoussai, it is not difficult to believe that a Euboean, probably Chalcidian, hand is at work here. The belly-bands of thick wavy lines are met in Eretria,⁶³ but are on the whole commoner in Boeotia; they might then be quite at home in Chalcis.⁶⁴ All other elements in the decoration can well be Euboean and are easily matched.⁶⁵ The Cyclades do not enter the picture at all. The characteristic bands of thick wavy lines recur on vases from Bizenio and Tarquinia which otherwise favour metope decoration of the type commonly met in the Cyclades and Euboea.⁶⁶ It might be thought that in Etruria this is derived more directly from Protocorinthian, but the Protocorinthian metope patterns are generally much simpler than those affected in the Cyclades and other centres, where the multiple brush encouraged the painters to indulge in more varied combinations of chevrons, dots, wavy lines, lattices, &c., usually eschewed by the more fastidious, though no less mechanical, Corinthian artist.

If the early cemeteries of Euboea had been excavated and published rather than the Thera graves and the Rheneia Purification Pit, I fancy that the archaeologist's and historian's assessment of the almost ubiquitous 'Cycladic' influence would have been rather different—and in many instances more in keeping with the suggestions of the literary evidence.

Returning to the Geometric fragments from Chalcis which formed the starting-point of this discussion, it would seem fair to say that most belong to the eighth century B.C. and that but few need go far, if at all, into the seventh century. The significance of this lies in the fact that of the remainder of the Chalcis fragments, to which we turn now, none need be earlier than the mid-sixth century, nor are there any casual finds from Chalcis to fill this hiatus through most of the seventh into the sixth century.

⁵⁷ There is, however, much about the spouted crater from the grave with Nestor's cup (*JHS* lxxvi (1956), Suppl. 61, fig. 14 centre) to remind one of fragments from Eretria. Dr. Buchner has shown me photographs of recent finds which have a more distinct Eretrian or Euboean appearance; see also n. 27.

⁵⁸ The animated horsemen on the sherd *RM* lx/lxi (1953-4) 52, fig. 3, recall a little the looser Eretrian style, as *Eretria* 18, fig. 19.

⁵⁹ Blakeway, *op. cit.* pl. 34, 88 and Π, and p. 200. On the absence of 'pre-colonizing' pottery in Sicily see F. Villard and G. Vallet in *Mél. d'Arch. et d'Hist.* lxxviii (1956) 7-27.

⁶⁰ On Greek influence in Etruria see Blakeway, *JRS* xxv (1935) 129-49.

⁶¹ Åkerström, *op. cit.* 69-73, pls. 17, 4 and 6; 18.

⁶² For the cylindrical feet splaying at the toes see n. 46.

⁶³ e.g. *AE* 1903, 19 f., figs. 11, 12; *Eretria* pl. 4, B 2.

⁶⁴ In the west they recur on a locally-produced crater from Chiusi, Åkerström, *op. cit.* pl. 27, 6.

⁶⁵ For the tooth pattern on the neck of the vase shown in Åkerström, *op. cit.* pls. 12, 1; 17, 4 and 6 (cf. pl. 14, 3; 15, 7), compare the Eretrian vases, *AE* 1903, 27, fig. 16; *Eretria* 10, fig. 14, pl. 2, B 16.

⁶⁶ Åkerström, *op. cit.* pls. 12, 1-2 (and cf. 4); 24, 1-3; pls. 24-25 for the metope style in Etruria.

The Later Pottery

The archaic period is poorly represented in the sherds from Chalcis, though some are interesting and unusual. They are figured here on PLATE I. **24** is from a shallow cup on which the combination of erratically applied white and brown is rather reminiscent of the slapdash sixth-century Eretrian styles. **17** seems also from a shallow cup; I cannot determine the pattern in the handle-zone, which was defined below by a light groove. Other cup fragments bear notable inner decoration. Among them **44** is striped on the exterior and bears inside a centrepiece of tongues surrounded by what seems to be an outline cable, though its structure is not clear. **45** has a lightly polished grey surface and the pink-buff fabric is slightly micaceous; the outside was not painted. **46** was lightly slipped and carries outside bands rather broader than those which appear within. Another fragment from a cup is lightly ribbed and painted outside; its inside is decorated with concentric incised circles over the brown-black paint, rather an Ionian touch. **49** is from the neck of a closed vase, of a good fabric but somewhat paler and greyer than Attic.

Some fragments of a fine and apparently local fabric carry a good black paint and are from lekanai or bowls. Characteristic is the use of broad red stripes in the interior of the bowl, either over the black (as **48**) or on a reserved band; another fragment has just such a red stripe on the outside above a reserved zone. In a reserved band below the lip on one sherd appear two horizontal wavy lines, but the exterior of **48** is painted. Possibly to be associated is the unusual conical foot **53**. The inside of its bowl is painted and deep-sunk as though the walls were to rise sharply. It might be from a kantharos, a shape to which such a foot would not seem too foreign,⁶⁷ but I know no close parallel for the decoration. The red band on the outside lies directly on the clay, and the foot is unpainted beneath and flat but for a central hollow cone about half the diameter and height of the whole foot; the fabric seems Euboean.

Imports from Attica include fragments of late-sixth- and early-fifth-century cups, and **51**, from a skyphos. Of the later years of the fifth century is the lower part of a squat lekythos with an ovolo frieze as base-line to the figured scene. Possibly from a chous is **52** (there is a reserved line in the paint within); a child is represented, painted white with brown details on arms, face, and body, and with head raised and arms outspread. Behind is painted part of an object which it is difficult to interpret as drapery, and more white with overlying brown flecks appears at the bottom left corner of the sherd; I cannot reconstruct the scene.

There are many fragments of black vases of the fifth and fourth centuries. By no means all of them are Attic, but excavation at Chalcis could easily provide a much fuller record of local and imported styles than the scraps reviewed here. Shapes include cups, Corinthian-type skyphoi, horizontally ribbed kantharoi, and askoi. Some of the more interesting pieces with impressed and rouletted decoration are illustrated here. On **54** appear framed palmettes within a rouletted band; the paint is metallic, the fabric pink, the underfoot painted, and an incised line runs at the outer junction of foot and wall. **55** has stamped leaves within rouletting, the painted underside bears a graffito, there is a reserved groove at the junction of foot and wall, and the fabric could pass as Attic. **56** has a distinctly grey fabric and is from a fish-plate; a rouletted band is interrupted by what looks like part of a stamped star and the underfoot is not painted. The saucer **57** (FIG. 1) has a rouletted band within and a painted underfoot.⁶⁸ Some flat vertical rims of shallow dishes are painted with upright bars and crosses, and unpainted beneath; they are like fish-plates, but the rim projects above as well as below the floor. A near-complete small

⁶⁷ Cf. P. N. Ure, *Sixth and Fifth Century Pottery from Rhitsona* pls. 10, 11.

⁶⁸ Cf. *Hesp* iii (1934) 435; ours is an early type.

lamp covered with poor red-brown paint has a central vertical passage and is probably of the fourth century.

58 (PLATE 2 *d*) is of particular interest, as it is from the wall of a kantharos decorated in the Boeotian Kabirion style, and is one of the few vases of this class to be found outside the Kabirion sanctuary near Thebes.⁶⁹ The vine frieze with its leaves and bunches of grapes occupies the main part of the vase, though usually it is reserved for a subsidiary position,⁷⁰ and here it is unusually associated with a wave pattern; the drawing is very like that of the Satyr Painter.⁷¹

Of other fragments illustrated, **29** is from a bowl or cup with crudely painted loops on the outside and, within, alternate cream and purple lines lying obliquely to a broad cream stripe. It is probably a local variety of late Hellenistic, as is the fragment **28** with its cream and yellow lines within. **50** is from the grooved rim of a red-painted plate; on it a white wavy line and applied clay blob. **47** is from a cylindrical pyxis, akin to West Slope ware.⁷²

Most of the pottery on the site is Hellenistic, but, being neither individually interesting nor from a controlled excavation, the fragments merit no more than a brief summary here. Kantharos and skyphos fragments are the most common, one of the latter being a foot with a Δ graffito beneath. A bowl striped both in and out bears on its flat rim a poorly drawn egg-and-dart pattern. There are several fragments of lamps, fusiform unguentaria, and moulded bowls. Of decorated pottery there are some fragments of Attic West Slope ware and slipped lagynoi. The coarse pottery is mainly bowls, and one fragment from the rim of a spheroid pithos has an impressed egg-and-dart pattern. A pyramidal loom-weight has on its side a deep-incised Π. Finally, two stamped handles from Cnidian wine amphorae of the second century B.C. were found.⁷³ I noted no distinctively Roman pottery.

There are among the sixth-century fragments mentioned above some which are sufficiently unusual to warrant at least passing comment. But there is not enough to attest a distinctive Chalcidian style in black-figure.

Further positive evidence about the centre of production for the black-figured 'Chalcidian' vases found in the west is not forthcoming.⁷⁴ 'Chalcidian' fragments have been found in the Anglo-Turkish excavations at Old Smyrna, and this constitutes the first authenticated find in Aegean Greece.⁷⁵ We need, however, be no more surprised at its occurrence there than at the Etruscan bucchero which also found its way so far east. It does not support a Euboean origin for the ware.⁷⁶

Another factor which might be cited in the controversy and which has, I believe, been ignored hitherto, is the kantharos painted on the 'Chalcidian' cup in the Louvre.⁷⁷ It is of the high and slender-stemmed variety typical of Boeotia, and, to a lesser extent, of Attica. It is unknown in Corinth. Chalcis would have recognized it readily. In the west it would be familiar

⁶⁹ We may recall here the tentative identification of a sanctuary of the Dioskouroi Kabeiroi near Chalcis (comment in B. Hemberg, *Die Kabiren* 244 f.).

⁷⁰ Cf. G. Bruns in P. Wolters, *Das Kabirenheiligtum* pls. 13, 14 and *passim*.

⁷¹ *Ibid.* 113 ff.

⁷² Cf. *CVA* Reading i, pl. 40, 5 and references in the text, pp. 60 ff.

⁷³ I am indebted to Miss V. R. Grace for the following description of them:

1. 'Επ[ι] 'Αγαθο
κλεῦς [Μέ
νητος Κυ
δίου. (inverted anchor).

Second half of the second century B.C.

2. Τηνάδης
Πυθόκριτος. (horse's head).

Late second century B.C.

⁷⁴ Rumpf (*MuZ* 55) reports the find of 'Chalcidian' by the late G. Welter, but the excavator told me that he had found a kiln and pottery—Chalcidian, not 'Chalcidian'. The lekane mentioned by Rumpf (*ibid.* 55, n. 2) appears in *Eretria* pl. 13, B.F. 16, and is probably Attic.

⁷⁵ Mr. J. M. Cook kindly allows me to mention this find which he will publish.

⁷⁶ Though H. R. W. Smith (*The Origins of Chalcidian Ware* 103) declares that such a find would 'embarrass' the theory of a western origin.

⁷⁷ A. Rumpf, *Chalkidische Vasen* pls. 188–9.

only from imports, and, while the Attic shape was rarely made or exported, the Boeotian travelled west not at all. The only centre making kantharoi in the west was Etruria, whose bucchero kantharoi have a quite different, squatter foot.⁷⁸ It looks as though the 'Chalcidian' artist learned the shape in Greece. This suggests a somewhat different approach to the 'Chalcidian' problem. Where did the artists learn their craft?

That some of the painters of this important group were Chalcidians is proved by the letter forms of the painted inscriptions. The provenances of the vases show that the probable point of distribution and possible place of manufacture was the Chalcidian colony Rhegion. The theory favouring an Etruscan origin is now generally discounted,⁷⁹ though it is in Etruria that we have found considerable Euboean influence in the Late Geometric period, possibly via Cumae. Vallet has reopened the case for Rhegion.⁸⁰ If the Chalcidians who founded the school learned to paint in Euboea, we might reasonably expect to find some sort of 'proto-Chalcidian' in Greece. That none has been identified is, I believe, largely due to the fact that archaeologists have been expecting too much. The stylistic elements in 'Chalcidian' are Corinthian, Attic, and Ionian, in that order, blended and controlled to afford what is probably the most satisfactory decorative pottery of the sixth century. The Corinthian element, largely dependent on the red-ground Late Corinthian vases, is there because the Corinthian vases were the main rivals in the western markets at the time when the 'Chalcidian' school was founded. To the demands of the market the Corinthian elements can be attributed, and not necessarily to the nursery in which the 'Chalcidian' painter learned his craft. It need not therefore matter a great deal that an artist in Chalcis had neither need nor much opportunity to imitate the Corinthian export models which were, like the Attic 'Tyrrhenian', largely for the western, not home, markets. Attic influence on a painter in Chalcis requires no explanation; on one in Italy it could be explained by the competition of imports, though at the time that the 'Chalcidian' vases begin to appear the Corinthian imports were more numerous. Ionian influence on a painter in Chalcis is quite conceivable, and there are certainly Ionian touches in the mid-sixth-century black-figure made in Eretria, though there is no hint of 'Chalcidian' in it; in Italy Etruria was the main centre with an art with distinct Ionian features, and may have attracted Ionian artists, a factor which Smith uses to support an Etruscan origin for 'Chalcidian' ware. Rhegion could only feel such an influence at second hand, though recent excavations in Sicily have proved how strong Ionian influence could be in the southern colonies also. It appears then that the 'Chalcidian' artist might have learned to paint either in the west or in Euboea, though the balance is perhaps slightly in favour of the latter.

Decisive evidence for the influence of 'Chalcidian' on Attic or Corinthian would be an invaluable point in favour of the 'mainland' theory. Decorative details are delusive in this period,⁸¹ but correspondence of shape could well be significant. In this respect the apparent imitation by Attic of a characteristically 'Chalcidian' cup shape is of no little importance,⁸² as is also the crater in Corinth which seems to be imitating the 'Chalcidian' form.⁸³ The close correspondence

⁷⁸ P. Courbin suggests that it inspired the Attic kantharos shape in black-figure (*BCH* lxxvii (1953) 339 ff.). The Etruscan shape might easily have been inspired by East Greek cups and Chian chalices (two fine examples from Vulci), which have tight feet with splaying bases in the seventh century; and the chalices have straight walls. The Attic shape might have much the same ancestry. The kantharos on a high, narrow base is known now in Cycladic Geometric (from Kimolos, *AM* lxix/lxx (1954-5), Beil. 57-58). Finally, we can only guess at the shapes of metal vases current in the seventh century; cf., however, the

bronze skyphos with a conical foot from Perachora (*Perachora* i, pl. 58, 2).

⁷⁹ Cf. Dunbabin, *The Western Greeks* 252, n. 1.

⁸⁰ *CRAI* 1951, 285 and cf. *REA* lviii (1956) 42 ff.

⁸¹ Lippold's arguments for the influence of 'Chalcidian' drawing on Attic are shrewd but not conclusive (*JdI* lxxii (1952) 78-92).

⁸² H. Bloesch, *Formen attischer Schalen* 28 f.; F. Villard, *REA* xlviii (1946) 180.

⁸³ M. T. Campbell, *Hesp* vii (1938) 561, fig. 3, 29 and p. 563. Cf. Payne, *NC* 330.

in shape and decoration between a class of Attic and 'Chalcidian' lekanai could also prove an important factor,⁸⁴ but on this and other problems about the borrowing of vase shapes much more evidence and detailed discussion is required, and, if possible, more conclusive evidence from excavations.

Wherever the vases were actually manufactured, I find it difficult to believe that their potters and painters were trained anywhere other than in some mainland Greek centre; the inscriptions on the vases point to Chalcis, and excavation may one day prove that indication accurate, though it would not require the discovery of true 'Chalcidian' there to clinch it. It must even remain an open possibility that the vases were manufactured there; 'For Export Only' is a label which a state must often see attached to its finest products.

II. ERETRIA

Since my publication in *BSA* xlvii of the pottery found at Eretria by Kourouniotes, new excavations on the temple site have been undertaken by Miss J. Constantinou. Of these preliminary reports only are so far available in *PAE* 1952, 153 ff.; *Tò Ἔργον τῆς Ἀρχαιολογικῆς Ἑταιρείας* 1955, 35 ff.; 1956, 37 ff.; *BCH* lxxx (1956) 298 f. The final publication will help considerably to an appreciation of early Euboean styles, as there is better hope both for complete vases and for some accurate stratigraphical evidence, which may throw light both on the pottery and the important early structures beneath the temple of Apollo Daphnephoros. Most significant, perhaps, is the discovery beside the temple of a potter's kiln. I have little to say here of these new finds, and have to mention only some recent discoveries near Eretria. With the gradual reopening of the National Museum in Athens a number of archaic Eretrian vases have emerged which I here add to those previously published, together with others which either may be Eretrian or seem relevant. Some black-figured vases in other collections I now see to be Eretrian, or probably so, and these appear here also.

Geometric and Earlier Pottery

Kourouniotes's excavations yielded fragments of a cup decorated with pendent semicircles, and an amphora with some Protogeometric decoration.⁸⁵ The cup and the class to which it belongs have been discussed already. To neither of the vases from Eretria could an early date be confidently assigned, but the new excavations have revealed true Protogeometric, of which one sherd has been published.⁸⁶ This carries the history of the sanctuary back to at least 900 B.C., and makes it more probable that the previously-published sherds can be dated before 800. Perhaps more important for the history of Eretria in this period is the chance discovery of Protogeometric tombs by local inhabitants at a point about 2 kilometres east of Eretria. Mr. R. H. Tomlinson kindly told me of these finds and showed me a photograph of some of the vases. They are in a good provincial Protogeometric style, and include deep kalathoi with impressed (?) triangle decoration like that reported on finds in Skyros.⁸⁷ These tombs represent the earliest evidence for Iron Age occupation in this area, as the Protogeometric pottery from Eretria itself is from the temple only, and the earliest graves are of the eighth century.

For the Geometric wares the new excavations have afforded many more examples⁸⁸ of the distinctive cups which have already been discussed in this paper, as have the imitations of Protocorinthian kotylai with wire-bird friezes. These and other Geometric wares from Eretria

⁸⁴ Cf. *Eretria* 42 f., no. 16.

⁸⁵ *Eretria* pl. 1, A 18 and p. 8, fig. 13b; *PGP* 199.

⁸⁶ *PAE* 1952, 159, fig. 4, 2.

⁸⁷ *PGP* 165; cf. H. Hansen, *Studies presented to D. M.*

Robinson i. 63.

⁸⁸ *PAE* 1952, 162, fig. 10; cf. *Tò Ἔργον* . . . 1955, 37, fig. 37 left (= *BCH* lxxx (1956) 298, fig. 13).

discussed above are better regarded as Euboean until more specific evidence from Chalcis makes clear the differences, if any, between Eretrian and Chalcidian wares.

Finally, there is a toy animal-vase now exhibited in Athens which is 'from Euboea'. It is figured here for its alleged provenance and intrinsic interest as much as for any possible reflection on Euboean Geometric art or taste (NM 14481: PLATE 3).⁸⁹ It is of a horse or mule carrying six amphorae on its back and with its legs replaced by wheels. Its hollow body was made on the potter's wheel. Two similar specimens are known to me. One, from a grave in the Kerameikos in Athens,⁹⁰ has a fuller, less cylindrical body, longer legs, and decoration of circles which contrasts strangely with the other vases in the grave, which are of the third quarter of the eighth century. It may not be Attic. The second is in London and is much more like ours in proportions and decoration, but it is far more poorly executed.⁹¹ It carries five black belly-amphorae and a rider. Neither of these two examples has its wheels preserved. The horse from Euboea offers little evidence for its date, but the zigzag band on its flanks reminds one of the best Dipylon vases. It is probably of the third quarter of the eighth century. Its fabric could pass as Euboean or Attic of this period.

Archaic Pottery

To the late seventh-century grave-amphorae of Eretria (Group C) I added a jug in the Louvre, illustrated in *Eretria* pl. 7, C 12. There was occasion to comment on its unusual shape, high neck, spherical body, and conical foot, though an Attic black-figured parallel was cited, and it may be noted that later some Etruscan vases recall the shape.⁹² By far the closest parallel is a jug in Athens from Tanagra (NM 2244: PLATE 2 f).⁹³ Its provenance brings it well within the probable sphere of Eretrian influence and it may very well be Eretrian. The decoration suits Eretria—lavish and unimaginative use of a sextuple brush for the flecks on the rim, wavy-line friezes on the neck, and blobs on the shoulder; the last are particularly reminiscent of the decoration on the Eretrian jug in the Louvre. The Tanagra jug has a rather simpler lip and toe than that in the Louvre, and its handle is not strutted.

Perhaps less intimately connected with the Louvre and Tanagra jugs is another in Berlin, from Thebes (FIG. 2).⁹⁴ It has the same high neck, spherical body, and high base, but lip and foot are elaborately moulded, the foot with a cavetto reminiscent of the feet of 'Chalcidian' black-figured cups or the Ionic architectural moulding appearing on some wall- or column-bases. The handle is strutted, as on the Louvre jug. Red stripes outlined with thin lines are an important element in its decoration, with lavish multiple-brush work and a metope pattern of rosettes. In these respects it closely resembles the other jugs I have cited, but its neck decoration is unique, and more in keeping with Protoattic, to which class Boehlau assigned it. Shape, subsidiary decoration, and provenance make this attribution improbable and, if not Eretrian, it is a Boeotian vase closely related to the proved Eretrian.

⁸⁹ The photographs are by Alison Frantz. It was confiscated at Chalcis in 1897. Height, 21.0; length of animal, 31.0; overall length, 32.5. (All measurements are in centimetres.)

⁹⁰ *Kerameikos* v. 1, 245, pl. 144, inv. 1311 (gr. 50).

⁹¹ BM 1921.11-29.2. I am indebted to Mr. R. V. Nicholls for drawing my attention to the piece, and to Mr. R. A. Higgins for notes and a photograph of it.

⁹² e.g. Sieveking-Hackl, *Die königliche Vasensammlung zu München* pl. 42, 981-2. An unpublished early Attic black-figured vase from Vari also reflects the shape.

⁹³ From Stamatakis's excavations for the Archaeological Society, 1874; height 20.7; pink fabric with red-brown

paint. There are three stripes just inside the lip, and the back of the handle is painted; the foot is hollow. There appears to be no added colour.

⁹⁴ Berlin 2664 (F. 58). My illustration is taken from J. Boehlau, *JdI* ii (1887) 54, fig. 16. Ibid. 53 f., no. 11, the vase is discussed, and see A. Furtwängler, *Beschreibung der Vasensammlung* 10 f., no. 58: 'Mehrere der horizontalen Linien sind mit dunkelroter Farbe direkt auf den Thongrund aufgesetzt, ebenso einiges Detail der Bilder (an der Blume).' I have not seen the vase. F. records its height as 38.5. The drawing appears also in M. Ohnefalsch-Richter, *Kypros, the Bible and Homer* pl. 89, 8.

A dinos stand in London may also be loosely associated with the Eretrian vases (BM 1929.7-15.1; PLATE 6 *d*).⁹⁵ All the elements of the decoration could be Eretrian, hooks, filled rays, alternate filled and unfilled triangles; and I could readily believe it Eretrian. It might alternatively be Protoattic, but, if so, it belongs to the first half of the seventh century with the Phaleron group, whose decorative repertoire has a distinctly Eretrian flavour; or with the black-and-white styles of the mid-century; certainly no later. The shape is known in Attica by the middle of the seventh century,⁹⁶ and is as well known in east Greece, where such stands are distinguished by the size of their rounded centre-section;⁹⁷ and there is a probable Protocorinthian example.⁹⁸ The explanation of the London stand may lie with the group of archaic vases on Delos which have been associated with Eretrian.⁹⁹ Many of the decorative motifs are to be found on them, and a North Cycladic origin would explain resemblances in Euboea and East Greece.



FIG. 2. BERLIN 2664 (F. 58).
(After *Jdl* ii (1887) 54, fig. 16)

In the same context may be considered a small oenochoe in Oxford (1887.3404; PLATE 6 *c*).¹⁰⁰ The shape and general spirit of the decoration is again of the Attic Phaleron group. It is in fact alleged to come from Phaleron, and it entered the museum with two other oenochoi, one certainly of that class.¹⁰¹ It differs from them, however, in a number of significant details, and the suspicion might be held that it was grouped with the others for its superficial resemblance. It may still be Attic, but, if so, it represents Attic in the style which is closest to late seventh-century Eretrian, and it merits attention here. Its fabric is not the pale buff of typical Late Geometric and Subgeometric Attic vases, including those of the Phaleron group; it has already taken on the orange tinge of the later Attic wares and has an appreciably better prepared surface. The small Phaleron oenochoi hardly survive the middle of the seventh century¹⁰² and do not generally indulge in colour. The red bands with white rosettes and the tongue patterns on the Oxford vase are hardly credible in Attic until some years after the middle of the seventh century;¹⁰³ so, if it is Attic at all, it must be considered a Phaleron straggler. If it is

⁹⁵ Height 20.3; it is completely hollow. Pink-buff fabric with few impurities; a painted line inside the top of the bowl.

⁹⁶ e.g. *CVA* Berlin i, pls. 28-33.

⁹⁷ e.g. K. F. Kinch, *Vroulia* pl. 15; London BM WT 220; *Larisa am Hermos* iii, pl. 61. Cf. the stand on the Fikellura sherd, *CVA* Cambridge ii, pl. 497, 10, and *BSA* xxxiv (1933-4), pl. 6. Their bronze prototypes in the Near East are discussed by K. R. Maxwell-Hyslop, *Iraq* xviii (1956) 152 f.; and cf. C. M. Robertson, *BSA* xliii (1948) 46-49.

⁹⁸ Payne, *NC* 276, no. 116, fig. 119.

⁹⁹ *Eretria* 29, and n. 163.

¹⁰⁰ P. Gardner, *Ashmolean Vases* 2, no. 20. Height 12.0; pink-buff fabric with a very little mica. The red bands on neck and body and on alternate tongues overlie the grey-black paint. The outer dots of the rosettes on these bands are

cream-white, their hearts black. A double-moulded handle.

¹⁰¹ 1887.3412 (Gardner, op. cit. no. 18, fig. 4); the third oenochoe (1887.3403, *ibid.* no. 19) is Late Geometric, with a recumbent goat on the neck. The three in no way form a group, and are related only by general shape and alleged provenance.

¹⁰² R. S. Young, *AJA* xlvii (1942) 49 f.
¹⁰³ J. M. Cook, *BSA* xxxv (1934-5) 168, n. 2, 187, 195; Young, op. cit. 56. Both appear on vases of the group in the Kerameikos: K. Kübler, *Altattische Malerei* 21, fig. 13; cf. 66, pl. 60. Würzburg 56 (E. Langlotz, *Griechische Vasen in Würzburg* pl. 4) has black-and-white style ornament and must be quite late. Oxford 1935.226 has plain black tongues on the shoulder. A. Greifenhagen quotes a late example in Leipzig (I 2327; in *AA* 1935, 415). For Eretrian white rosettes on red bands see *Eretria* pl. 2, B 8; pls. 5-7, C 3, 4, 12.

not Attic, a date nearer the end of the century would be quite credible, and its polychromy would point rather to Eretria. For its subsidiary decoration, the frieze of wavy lines is not foreign to Attic, but completely at home in Eretria, where also the practice of devices between rays is later a commonplace. Here there are hooks, as on the London dinos stand (PLATE 6 *d*). This combination is met in Protocorinthian, but early in the century.¹⁰⁴

The vases illustrated in PLATE 2 *c* and *e* are in Athens. The first resembles a distorted calyx crater.¹⁰⁵ Topped and tailed, it is no more than an ordinary kotyle with something approaching ordinary kotyle decoration. The archaic potter is exercising the privilege, as he often does, of adding neck and foot at will to a familiar basic vase shape. It is, however, unique for a kotyle to be treated in this manner.¹⁰⁶ A sextuple brush provided the dot, squiggle, and dash decoration in all the main friezes. A double and a triple brush were used on the foot; for this decoration and for the profile of the foot compare the Tanagra jug, PLATE 2 *f*. The vase has no known provenance, but the red bands and the slipshod multiple-brush work point to Eretria. There is certainly nothing to compare with it from Boeotia, although it is, in a way, related to the Boeotian bird-kylikes.¹⁰⁷ I am inclined now to regard Eretria pl. 3, B 1 as a foot, perhaps from a vase of this type; for its toe profile compare the Louvre jug, *ibid.* pl. 7, C 12.

The second vase (PLATE 2 *e*)¹⁰⁸ is a miniature amphora with its neck broken away. Its outline recalls the familiar Eretrian and Boeotian grave-amphorae, but the use of red paint for the band at the belly and the double vertical lines on the foot divorces it from the main Subgeometric Boeotian groups and suggests that it may rather belong with the later vases of the Eretrian series.

The Group D amphorae of the early sixth century are distinguished by poor animal drawing with some incision and plenty of red paint (as Eretria pl. 8, D 4). Hitherto the style has been recorded only on grave-amphorae, but two other vases in Athens can now be added, a cylindrical lidded pyxis and a tetrapod 'kothon'. The pyxis (NM 276; PLATE 4) is alleged to be from Corinth.¹⁰⁹ On it appear three running dogs and a bird executed in a style rather more careful than that met on most of the Group D grave-amphorae. The filling ornament includes the characteristic black cross outlined in red, as well as hooks, and circle-and-dot rosettes. Between the rays on the lid are blob birds such as are found between rays on the shoulders of four of the amphorae (D 1, 2, 4, 5). It was a colourful vase with red and white hoops on the lid, and red bands above and below the main frieze. These bands also carry a metope pattern in white of triple lines and blobs, which can just be distinguished on the photographs. It is a pattern which appears on the lips of the earlier grave-amphorae, C 3 and 4.

Similar, though rather cruder in style, is the tetrapod 'kothon' in Athens, formerly in the

¹⁰⁴ E.g. F. Johansen, *Les Vases sicyoniens* pls. 23, 1; 28, 2; and cf. the Attic Phaleron amphora, *AJA* xlvii (1942) 34, fig. 18, and oenochoe in Boston, Fairbanks pl. 65, 558.

¹⁰⁵ NM 135; height 29.4, diameter at lip 22.7. Pale orange-buff fabric; painted a streaky brown within. Four red bands. The proportions and decoration of the kantharos from Rhitsona, *BSA* xiv (1907-8), pl. 10 *b*, may be compared.

¹⁰⁶ Cf. the bronze skyphos with a foot cited in note 78.

¹⁰⁷ These vases recall much of earlier Eretrian polychromy. The strange animals within Boston 97.363 (Fairbanks pl. 56, 531) are second cousins to the Eretrian creatures on the Group D amphorae. Boston 24.7 (Fairbanks pl. 57, 534) has details of decoration, as well as an unusual shape, which put it rather apart from the typical Boeotian bird-kylikes. It might, I suppose, be a Euboean

imitation, and the clay has white inclusions, which are found in some Euboean vases.

¹⁰⁸ NM 16306; height to shoulder 11.3. Pink fabric with a pale surface and very little mica. Single handles. Red for the belly band (overlying two black lines), at the junction of bowl and foot, and for the pairs of vertical lines on the foot. The frieze immediately above the red belly band carries a zigzag.

¹⁰⁹ Height 11.0, diameter 22.0. A good pink-buff fabric. On the lid: red circles on the black border, and red and white hoops on the central disk. Red bands above and below the body frieze; on them a metope pattern of triple lines and blobs in white. Red over black for the dogs' necks, bird's centre part, and alternate leaves over the bird; red outlines the crosses in the field and filling flecks. Unpainted beneath; the lid has a shallow flange.

Empedocles Collection (NM 18751: PLATE 5).¹¹⁰ On the inturned lip three dogs chase each other's tails; on the outside of the vase are two walking lions and two running dogs, alternating, and a bird. The shape is one familiar in Boeotia, but the four legs are something of a novelty beside the usual tripod arrangement. One of the legs is pierced with two holes, presumably for suspension. The filling ornament is as on the pyxis but more crudely executed, and the quadruple diamond motif appears beside the circle-and-dot rosette and red-outlined cross. This too was a colourful piece with its alternating red and black bands and hoops. The hoops beneath the vase are divided by thin painted lines, as on the fragment illustrated in *Eretria* pl. 3, B 1, and the lid, *ibid.* pl. 14, B.F. 5.

In their painting the pyxis and 'kothon' call to mind the grave-amphora D 1, *Eretria* pl. 8. The lion's muzzle, paws, and single incised shoulder-line link the vases, as does the filling of circle-and-dot rosettes and quadruple diamonds. D 1 is, by Eretrian standards, a fine vase. In the pyxis the same painter is equally impressive, but the 'kothon' is poor work. D 9 is another poor effort by the same hand, as is the fragment D 8, *Eretria* pl. 7; D 2 is an imitation—note the dotted-line motifs in the florals—and D 3 a parody. D 4, 5, 6, and 7 are by another painter with a different repertoire of filling ornament and quite different lions.

Finally, a note about dating. In *Eretria* 23–26 I used the more complete series of 'Melian' vases as a yardstick to suggest the dates of the Eretrian, considering both wares stylistically equidistant from the main centres of ceramic influence in archaic Greece. Some confirmation for the down-dating of 'Melian' is afforded by tombs excavated in Delos and published in *RA* xli (1953) 29 f., figs. 7, 8, but it is unfortunate that all the associated pottery has not yet been illustrated.¹¹¹

Black-figured Vases

Eretrian black-figure is principally represented by the three great grave-amphorae in Athens, *Eretria* pls. 9–11. Comparisons between the styles of drawing on each of the three vases do not readily permit generalizations about Eretrian peculiarities or characteristics, and it is rather the general impression that they give, as well as some decorative details, which stamp them as non-Attic. Apart, that is, from their traditionally Eretrian shapes, which are a decisive factor. As a result it is none too easy to attribute other black-figured vases to Eretria on grounds of figure drawing alone. But it is not impossible. The drawing on a black-figured hydria from Eretria led Amyx to the sure attribution of an amphora now in Vienna, which, if not by the same hand, certainly shows the same peculiarities in drawing.¹¹² A lekane in Munich affords close

¹¹⁰ Height 11.0, diameter 19.5. Painted within; a red band at the edge of the in-turned lip; alternate red and black bands on both sides of the feet; on the base alternate red and black hoops, four in all, and a black central disk, the hoops being divided by thin black lines. Red for the lions' and dogs' bellies and necks, the bird's wing panel and alternate feathers. Red outlines the black crosses of the filling. On the outside dogs are to be distinguished from lions by their bellies; compare within. I mentioned the vase in *Eretria* 28, n. 162, when, from an indistinct photograph, it seemed a tripod and Attic.

¹¹¹ Listing some 'Melian' finds in *Eretria* 24, n. 136 I omitted the famous fragments in Palermo from Selinus with part of an artist's signature (*MA* xxxii (1927) 303 ff., pls. 79–81). This omission was deliberate, but should be explained, as the piece has been called 'Melian' by all since the excavator, who had only the 'Melian' vases to compare for grave-amphorae of this type. The fabric of the Selinus

fragments is quite un-'Melian' and seems probably local (Prof. A. Åkerström concurs with this opinion). The drawing is quite un-'Melian'; details need not be pressed. If a home or source of influence must be sought for it, one might look to Crete. Strangely enough, many motifs are closely paralleled on the Lemnian vases (A. della Seta, *AE* 1937, 629 ff.). But one then has to reckon with the inscription, which does point to the Cyclades (but not to Melos, and not to all the Cyclades, Miss Jeffery tells me), so we may be dealing with a western imitation of, or derivative from, an undefined island ware. A fragment from Gela might be worth consideration as 'Melian' (*MA* xvii (1906) 248, fig. 185 *bis*; Dunbabin, *The Western Greeks* 472 takes it for Rhodian). I am not sure that the fragments from Aetos in Ithaca, *BSA* xlviii (1953) 344, fig. 34, 1071, need be 'Melian'.

¹¹² *AJA* xlv (1941) 64 ff.; cf. *Eretria* 40, nos. 2, 3.

parallels with the drawing on the grave-amphorae and may be regarded as another certain attribution.¹¹³ This vase and others which seem to stem from it and from the other certainly Eretrian vases have been assembled by Mrs. Ure and will be published and discussed by her. In this section I am concerned only to point out some whose close affinity to Eretrian is indicated as much by their distinctive subsidiary ornament as by their figure-drawing, as well as some which are distinguished either by their shape or provenance.

The first is a lekythos of unknown provenance now in my possession (PLATE 7 *e*).¹¹⁴ The spherical body suggests, from Attic analogies, a date in the second quarter of the sixth century, or a little later;¹¹⁵ but this is clearly not an Attic vase. The fabric is paler than Attic, matching Boeotian or Eretrian. Its decoration is decisive for its attribution to Eretria. The frieze of unlinked red buds and black lotuses, the latter being embellished with white sepals painted in a single line round the base of each lotus, is a motif familiar from the foot of the Herakles Amphora, *Eretria* pl. 10 *a-b*, and it recurs on other vases which have been attributed to Eretria; notably on an amphora from Tanagra and another from the Rheneia Purification Pit, which are figured in *Eretria* pl. 14, and on a plate from Delos.¹¹⁶ The motif is one which is met in Attic only on the shoulders of some lekythoi, never in the more prominent position it occupies on the Eretrian vases. In Late Corinthian II unlinked buds are also met, but they are not treated in any comparable manner.¹¹⁷ The absence of the arc-links is as notable a feature as the colour scheme; the red is always directly on the ground of the vase. The shape of the buds, with broad semi-circular bases and nearly straight sides, is also distinctive and unvarying on the vases quoted. On our lekythos the lotus and buds form the major decorative motif below simple black tongues.

The same frieze decorates the rim of a plate in the Louvre (CA 579; PLATE 6 *a*).¹¹⁸ We have already met it on the plate from Delos which bears the same representation—a running, or more probably flying, Nike. However, on the Louvre plate she moves to the right and the drawing is considerably finer. Also she is here carried by four wings, not two. This is not an arrangement usual in Attic, and it is generally regarded as an Ionian feature.¹¹⁹ The Nike is far more colourful than the photograph suggests, and in this at least approaches the Delos plate.

The black and red buds on a phiale mesomphalos in Athens (NM 17598; PLATE 7 *d*)¹²⁰ so far recall the Eretrian fashion that it seems justifiable to associate the vase, even loosely, with the Eretrian. The buds are not linked but are outlined in black.¹²¹ There are alternate red and black blobs on the rim and hoops on the knob-omphalos. A bud frieze of this type is quite

¹¹³ *CVA* iii, pl. 146, 3, 5-7.

¹¹⁴ Height 11.9. Pink-buff fabric; brown paint. Slightly hollowed under foot.

¹¹⁵ See E. Haspels, *ABL* 3-6.

¹¹⁶ *EADelos* no. 637, pl. 52. Cf. too the buds on the Gorgon Amphora (*AJA* xlv (1941) 65, fig. 3) and white sepals on the Wedding Amphora (*Eretria* pl. 9 *a-b*, lid). On these vases *ibid.* 40 (no. 3), 45, and on the motif *ibid.* 35 f., 45 f.

¹¹⁷ Cf. Payne, *NC* 155 f. Closest are the kotylai, *Hesp* xv (1946), pl. 66, 312; *CVA* Fogg Museum pl. 5, 17-18; *CVA* Heidelberg i, pl. 16, 6; Athens NM 16307; with alternate red and black buds and no links; there are no lotus sepals in the friezes.

¹¹⁸ Said to be from Thebes. Diameter 18.0; two suspension holes pierced in the flange of the foot. The profile is akin to D. Feytmans, *L'Ant. classique* xvii (1948) 184 f., pl. 2, D, with the base ring at the edge of the floor of the plate. A red fillet, and broad bands on the wings; red rosettes with white dots on either shoulder and the second flounce

of the skirt; white dots on the breast and across each of the lower two skirt flounces; white face, arms, and feet. The arms are bent across the body, the left hand being before the belt, the right dropped somewhat lower.

¹¹⁹ Exceptionally on the Amasis Painter's alabastron (S. Karouzou, *The Amasis Painter* pl. 11 and p. 10). Also on a late black-figured amphora on the London market (Eustace, 1956).

¹²⁰ No provenance. Diameter 10.0. Pink-buff fabric; grey-black paint: unpainted outside. Two suspension holes. Boston 77.223 (Fairbanks pl. 51, 543), from Larymna in Boeotia, may be related, and cf. R. Lullies, *Eine Sammlung griechischer Kleinkunst* pl. 15, 46. The Late Corinthian phialai have a quite different decorative scheme, cf. Payne, *NC* nos. 1349-51.

¹²¹ Cf. the treatment of the lotus petals on many Late Corinthian quatrefoil or cinquefoil aryballoi, but there is no colour contrast.

foreign to any other fabric than Eretrian, and although some Bocotian centre may be responsible, its affinity to the Eretrian fashion is noteworthy, and the vase itself might be Eretrian.¹²²

A plate in London, from Marion in Cyprus (BM 90.7-31.22, B 98; PLATE 6 *b*),¹²³ lacks the distinctive rim decoration of the Delos and Louvre plates, but, with its black and red hoops, is just as clearly not Attic. Such bands have been met on Euboean vases,¹²⁴ but they are common on Late Corinthian. The suspicion might well arise that this and other vases attributed to Eretria are no more than Corinthian imitations of Attic black-figure, and the pale clay, though not typically Corinthian, might represent an attempt to imitate the Attic fabric. The bud friezes at least, as we have seen, are not Corinthian, and I believe the same to be true of the London plate. After the mid-sixth century the Corinthian vase-painter gave up the attempt to rival Attic. Through the second half of the sixth century the painters worked, so far as can be judged, on wood or clay altars or plaques, not on vases, and they preserved a distinctive Corinthian style. There is no reason to believe that they attempted imitations of contemporary Attic vases until the end of the black-figure period in Attica, when they were led to imitate the poorest Attic styles.¹²⁵ To return to the London plate: the water-bird is rather reminiscent of the birds on the Eretrian Peleus amphora, *Eretria* pls. 9 *c*, 10 *c*. The sphinx is more slim and wooden than her Attic sisters, and the incision of her wing feathers more carelessly executed than one would expect on an Attic vase which had been painted as carefully; compare, however, the incision on the wings of the Nike of the Louvre plate (PLATE 6 *a*), or the Gorgon amphora in Vienna.¹²⁶

The characteristic Eretrian black-figure shape, the footed grave-amphora, is much influenced by both the shape and the decoration of the Attic lebes gamikos.¹²⁷ Three small vases in Athens which are demonstrably Eretrian approximate more closely to the Attic shape in that the traditionally high Eretrian neck is replaced by a lower neck much more like the Attic. The first is NM 12142 (PLATE 7 *c*) and it is from Eretria.¹²⁸ The simple linear decoration is crudely executed and most distinctive. The only added colour is in the faded white blobs which encircle the neck. The profile and proportions of the body and foot are very close to the Eretrian grave-amphorae and quite unlike the analogous Attic lebetes gamikoi, the miniatures of the Swan Group.¹²⁹ The second vase was once in the Empedocles Collection (E 619) but now in the National Museum (PLATE 7 *a*).¹³⁰ The more spherical body is closer to the Attic, and here we have the double handles with the lozenge between them which are characteristic of many Attic lebetes gamikoi and also appear on the Eretrian Peleus Amphora. It must be inspired by the

¹²² In this context an amphoriskos from Leontinoi deserves note. It is illustrated by P. Orsi in *RM* xv (1900) 89, fig. 31, and I am indebted to the authorities of Syracuse Museum for notes about it. The black and red unlinked-bud frieze on the body is, so far as I know, not met otherwise on Late Corinthian amphoriskoi, though it, and the red and black bands below it, closely reflect the scheme met on some small Late Corinthian kotylai (see above, n. 117). It stands rather apart from the general run of Corinthian amphoriskoi, and the appearance of this rather Euboean decoration in a Chalcidian colony is worth remark, even though it does not prove anything about the vase's origin.

¹²³ Diameter 14.3. Pink-buff fabric, the surface discoloured; dull paint. Two suspension holes. The profile as Feytmans, op. cit. pl. 2, D, with the floor rising saucer-wise and an attenuated base ring. White chest and face for the sphinx, white-red-white for the wings. Five crudely-painted hoops painted beneath the plate, and another within its small foot (diameter 4.7). Just outside the foot

runs a groove. Published in *JHS* xi (1890) 41 f., fig. 7.

¹²⁴ e.g. *Eretria* pls. 2, B 8; 3, B 1; 4, B 6; 8, D 10; 14, B.F. 5; and the skyphos-bowls described *ibid.* 7 (top); the 'kothon' (PLATE 5 *g*), and the foot from Chalcis (PLATE 1 *g*, 53).

¹²⁵ Cf. *Hesp* vii (1938) 560.

¹²⁶ *AJA* xlv (1941) 65, figs. 3, 4.

¹²⁷ See *Eretria* 30 ff. I have more to say of the Attic shape in the publication of the Attic pottery from Old Smyrna.

¹²⁸ Height 11.6. Buff fabric; brown paint. Single handles, under one of which are two oblique strokes. Around the neck is a row of white blobs, on the lip black blobs. The neck is painted within, the foot hollow and unpainted.

¹²⁹ J. D. Beazley, *ABV* 655, nos. 32-35; add one in Eleusis.

¹³⁰ Height to rim 17.0. Buff fabric; black paint fired reddish on the lid. On the flat part of the lid are two broad hoops with a line of blob-leaves between them. Blobs on the flat rim of the vase.

floral handles of many bronze vases.¹³¹ The banded decoration is quite un-Attic, as is the elaboration, by the addition of white dots, of the buds in the main frieze. Decoration on the flat rim might suggest that no lid was intended, but the lid belongs stylistically and in fabric. The knob is typically Eretrian,¹³² and most of the surface was prepared with a paint wash which darkens the naturally pale fabric; this phenomenon has been noted on other Eretrian black-figured vases. This piece must belong to the years around 500. There is an Attic miniature lebes gamikos in Athens (NM 16419) with similar shoulder decoration of linked buds with dots; the neck, the rest of the body, and foot are black, and the shape quite Attic. It affords a striking contrast with the Eretrian vase.

The third miniature lebes gamikos in Athens¹³³ (PLATE 7 *b*) is decorated in a manner reminiscent of the poorer Attic kylikes of the end of the sixth century. The knob of the lid is again distinctively Eretrian. The single handles were once attached, but must have fallen off before the firing of the vase. These miniature vases represent the end of the history of an Eretrian shape which began with the Subgeometric grave-amphorae, which in its black-figured examples submitted to the influence of the Attic lebes gamikos in shape and decoration, and which in these small vases has almost completely capitulated to the Attic shape.

The shoulder decoration of the lebes gamikos illustrated on PLATE 7 *a* is reduplicated, even in the details of white dots on the buds, on a miniature kothon in Athens¹³⁴ (PLATE 7 *f*) which must also be Eretrian. The execution and angularity of the buds recall the fragment of a larger vase in Eretria (*Eretria* pl. 14, B.F. 8). Another miniature kothon which is in Chalcis Museum and said to be from Elaies at Karystos may be associated (PLATE 7 *g*).¹³⁵

The fragmentary small amphora in PLATE 7 *h* was photographed in Eretria Museum by Professor H. R. W. Smith before the war. I have been unable to locate it since, and show it here for its unusual decoration and the virtual certainty of its local manufacture. A single bud droops on the shoulder of the vase, and of the three bands on the lower body one is bordered by thin lines in what seems to be an Eretrian manner.

A few notes may be appended on the black-figured vases previously published. Mrs. Ure rightly compares a skyphos in Reading with the animals on the foot of the Eretrian Wedding Amphora.¹³⁶ Of the vases loosely associated with Eretrian, two of the 'Andrian' alabastra, whose reported provenance so well suits the implications of their style, have been published again in *CVA* Heidelberg i, pl. 20, 1-4, 8, and others, unpublished, are reported.¹³⁷ The inscription on the plain oenochoe from Eretria in Bonn¹³⁸ had been explained by P. Jacobsthal in *JHS* lix (1939) 151. Reading omikrons for the dots we have $\tau\epsilon\mu\iota\tau\rho\iota\tau\omicron\nu\ \Pi\tau\omicron\iota\omicron\delta\omicron\rho\omicron$. The name Ptoiodoros is typically Boeotian but need no more surprise us in Eretria than it does in Athens in the sixth century.¹³⁹ Finally, Mr. E. Vanderpool has pointed out to me the similarities between the Eretrian amphora with painted inscriptions, *Eretria* 43 f., no. 17, pl. 13, and a vase from the Agora Rock-cut Shaft,¹⁴⁰ with others unpublished from the Agora in Athens. The likenesses

¹³¹ Cf. P. Jacobsthal, *Greek Pins* figs. 209-34.

¹³² Cf. *Eretria* 41, pls. 9, 10, 14 (B.F. 5).

¹³³ NM, Empedocles Collection E 273; height 10.0, diameter of the lip 3.3, of the foot 4.8. Pinkish-brown fabric with a red surface. The lid has a deep flange.

¹³⁴ NM 16327; height 5.5, diameter 8.5. Pinkish-brown fabric with a dusky surface and dull black paint. Faded white blobs on each bud. Hollow foot with a broad painted band within. A painted band within the lip and broad disk on the floor of the vase. Mrs. A. D. Ure drew my attention to the vase and to her reference in *CVA* Reading i. 58, where the museum number should be corrected.

¹³⁵ Height 7.2. Pink fabric. There is, perhaps, added

colour on the lotuses. There was a similar miniature kothon on the Athens market in 1957. ¹³⁶ *CVA* Reading i, pl. 16, 7.

¹³⁷ Mrs. A. D. Ure tells me of Cassel T 503, one in Laon and another in Göttingen. D. von Bothmer adds one on the Paris market, *AJA* lix (1955) 343.

¹³⁸ *CVA* i. 47, pl. 40, 1, 3; *Eretria* 44, no. 18, whence a faulty transcription was copied into *SEG* xii, no. 401. Mr. D. M. Lewis pointed out the references to me.

¹³⁹ J. D. Beazley, *Greek Vases in Boston* ii. 5.

¹⁴⁰ E. Vanderpool, *Hesp* xv (1946) 330, no. 318, pl. 67. The gloss of its paint is perhaps too good for Eretria. I mention two Agora bowls with Eretrian affinities in *Eretria* 28, n. 162.

are striking and the whole group may well be Eretrian. It is tempting to include the cinerary urn from the Marathon tumulus¹⁴¹ with its row of hooks in the handle-zone. If it is indeed to be associated with the great burial, one might read in it a tribute to the tragic fate of Eretria immediately before the battle.

III

'Old Eretria'

Strabo is our only authority for the existence of a ruined Old Eretria near the classical city which flourished still in his day and which has been rightly identified at Nea Psara.¹⁴² There are two relevant passages. In the first (403) he is describing the coastline of the mainland opposite Eretria. 'First there is Oropos and the sacred harbour called Delphinion, opposite which lies Old Eretria in Euboea, sixty stades away; after Delphinion comes Oropos at a distance of twenty stades and modern Eretria is opposite this, forty stades away.' In 448 he explains the desertion of the old city: 'The Persians sacked the old city and slaughtered the inhabitants, as Herodotos tells . . . the ruins are still shown and called Old Eretria (παλαιὰ Ἐρετρία); the modern city is a later foundation.'¹⁴³ That the new city was only first occupied after the Persian sack is palpably untrue, as the archaeological evidence proves. The finds of tombs show that 'new' Eretria was occupied as early as the eighth century B.C., and the sanctuary of Apollo Daphnephoros is now shown to have been attended in the Protogeometric period, by about 900 B.C. The Persian sack was so thorough, involving as it did the deportation of the surviving male population, that the complete disappearance from the tradition of the real reason for the move is readily understood; and in later times it would be natural enough for any visible signs of a disaster or an abandoned settlement at or near Eretria to be attributed to the tragedy of 490. But in this instance the story was told, not of a nearby village destroyed by the invader, but of a town which had once been the main centre of occupation in the area, in fact Old Eretria.

The clear implausibility of the reason Strabo adduces for the move has led most commentators to mistrust the whole account of an Old Eretria. But Strabo is explicit in his account of distances across the straits, and a ruined Old Eretria there must have been somewhere to the east of the later town and at or near a site known to the Eretrians and recognized as their former seat.

For the identification of Old Eretria two sources lie open, the archaeological and the literary. For the first we have the recent discovery of Protogeometric tombs, reported above (p. 14), at a point about 2 kilometres east of Eretria. This is earlier evidence for occupation than any yet forthcoming from Eretria itself, where the possible existence of a Protogeometric sanctuary is not proof that the centre of occupation lay there also. If the Eretrians held that their earliest city lay elsewhere, the least we can do is to try to believe them, even when Strabo records an impossible occasion for the destruction of that city. We have then, on the available archaeological evidence, to reckon with the possibility that down to at least Protogeometric times Old Eretria lay somewhere about 2 kilometres east of the later city, which was at that time marked only by a sanctuary, and whither the main population moved in the eighth century, by choice or necessity.

Until the settlement which belongs with the new Protogeometric tombs is certainly identified, we can only guess at the reasons for its abandonment. On the other hand, the new Eretria

¹⁴¹ *CVA* Athens i, pl. 19, 7; Haspels, *ABL* 92; cf. *Eretria* 28. Vanderpool, *op. cit.*, thought it could be a predecessor of the Agora vase. Pfuhl had speculated that it might be Eretrian (*MuZ* i, xi).

¹⁴² A good general discussion by F. Geyer in *Topographie und Geschichte der Insel Euböia* 55–57.

¹⁴³ ἐπέκτισται; which does not necessarily imply that it was founded in the same place.

may tell us why it was not the site of a major Greek city before the Geometric period. Its steep-sided acropolis rises some 2 kilometres from the good harbour which must have been the focus of interest for any settlement in the vicinity. Neither Mycenaean nor Protogeometric Greeks would readily have faced the difficulties involved in combining acropolis and harbour within one township. Also the low-lying area between the acropolis and sea was marshy and unhealthy,¹⁴⁴ except for the slight rise where the temple and modern town are to be found. That the Eretrians could appreciate the advantages and cope with the disadvantages of such an extensive site in the eighth century is still remarkable, until we remember that at the time Eretria was one of the foremost of the Greek states sponsoring ambitious colonizing projects. Finds of Mycenaean pottery have been reported on the acropolis¹⁴⁵ but, in the absence of any in the lower town and especially in the area of the sanctuary, this may indicate nothing more than a hill-top village more interested in security than the exploitation of the harbour. Indeed the value of the report may be questioned, as the finds remain unconfirmed, unpublished, and, so far as I know, are lost.¹⁴⁶

For further literary evidence about a possible site for Old Eretria we may turn again to Strabo. In 448 he speaks of the κώμη Amarynthos, seven stades from Eretria. The termination of the name is a typically pre-Greek one, and experience with such names elsewhere in Greece should teach us to look for an Early Bronze Age site, probably with continuous occupation through the Middle and Late Bronze Ages. Bursian and other commentators had been inclined to associate Amarynthos with Old Eretria,¹⁴⁷ but the suggestion won little support for the apparent reasons that, first, Old Eretria had been somewhat discredited because of the implausibility of the alleged occasion for its desertion; secondly, Amarynthos, the later deme, has been identified with the modern Kato Batheia where nothing earlier than the sixth century has been found;¹⁴⁸ thirdly, it seemed odd that Strabo was not more specific in identifying the two, though the way he runs together his accounts of Amarynthos, Old Eretria, and Artemis Amarysia is surely significant. In answer to the first point we have already found an explanation for the introduction of the Persians into the account, and the probable time at which the move from Old to New Eretria took place, in the eighth century. The second and third objections can be treated together. Kato Batheia has been identified with the deme Amarynthos,¹⁴⁹ more because of inscriptions which have been found there than for any extant or excavated remains of appropriate antiquity. Not one of the inscriptions mentions the deme. A number of votive inscriptions from Palaiochora, near Kato Batheia, name Artemis, Apollo, and Leto,¹⁵⁰ while another from near Kato Batheia mentions the temple of Artemis Amarysia.¹⁵¹ Mention of Leto and her children alone is not enough to support the identification of the temple of Artemis Amarysia at the find-place of the inscriptions, so we are left with the solitary reference to the temple. If the inscription did once stand in the sanctuary, we are still not obliged to believe that it has not wandered thence since antiquity. Kato Batheia is quite an old town and, as the only one of any size in the vicinity, would readily have attracted worked blocks from any ancient site nearby—and not necessarily close nearby. The inscriptions alone are not enough. When Strabo says that Amarynthos is seven stades from Eretria, more concrete evidence than is so

¹⁴⁴ The malarial character of the ground led to the abandonment of Eretria in later times until the new township of Nea Psara was founded.

¹⁴⁵ *AA* 1922, 316.

¹⁴⁶ Pre-Greek, Early Helladic finds in the lower town are not relevant here. Kourouniotes figured one EH vase (*AE* 1903, 10, fig. 5), and more recent finds have been reported and illustrated (*PAE* 1952, 160, fig. 5).

¹⁴⁷ C. Bursian, *Geographie* ii. 420 f., n. 1. Cf. H. G. Lolling, *AM* x (1885) 352–4; D. S. Stauropoulos, *AE* 1895, 155–63.

¹⁴⁸ Attic late black-figure, G. A. Papabasilieiou, *Περὶ Τάφων* pl. 19, 1 (Haspels, *ABL* 216, Edinburgh Painter no. 12).

¹⁴⁹ W. Wallace, *Hesp* xvi (1947) 134; A. Philippson, *Die griechischen Landschaften* i. 2, 608.

¹⁵⁰ K. Kourouniotes, *AE* 1900, 5 ff.; *IG* xii. 9, p. 161.

¹⁵¹ *IG* xii, Suppl. 553, 20.

far forthcoming is required to support an identification of the site at four times that distance. It remains then an open possibility that Amarynthos and the temple of Artemis Amarysia may be identified elsewhere than at Kato Batheia, perhaps at the distance recorded by Strabo, and, if so, in the vicinity of the newly-found Protogeometric tombs.

Amarynthos and its sanctuary were held in particular respect by the Eretrians. It was there that Strabo saw the stelai commemorating the great procession of Eretrian cavaliers and infantry, and the famous tactical agreement between Eretria and Chalcis, μή χρῆσθαι τηλεβόλοις. Artemis' epithet there reflects the antiquity of her cult, no doubt senior to that of Apollo Daphnephoros at Eretria. That the town was once the main seat of occupation in the neighbourhood may be readily believed. Strabo distinguishes Amarynthos, the still extant deme and temple, from ruined Old Eretria, or at least does not say specifically that they are at the same place. Old Eretria we suspect of being the Bronze Age and Protogeometric town of Amarynthos; its temple may well have stood a little distance from it. When Strabo mentions Old Eretria he is speaking of crossings from the mainland opposite, so we should probably look for Old Eretria-Amarynthos by a harbour or suitable anchorage, and the temple a little inland.

Field work and excavation could resolve the question. Dr. I. Papademetriou has kindly told me of his recent explorations in the area of the new Protogeometric tombs and of his discovery of Mycenaean pottery there. This seems striking confirmation of the existence of an Old Eretria in the vicinity. He had independently concluded that both Amarynthos and Old Eretria were to be sought here.

Euboeans, East and West

The reassessment of the pottery evidence from early Greek sites in the central and eastern Mediterranean which has been attempted above permits speculation about Euboean interests in areas other than those generally associated with the island. At the Greek trading town of Al Mina (Posideion) in North Syria some certainly Euboean pottery has been identified, and a case has been made for allotting much of the early Greek pottery from the site to Euboea rather than, more generally, the Cyclades. We may even suspect that Euboean interest could have been a prime factor in the establishment at Al Mina because the earliest Greek pottery there seems likely to be of Euboean origin. The part played by the Cyclades in the dissemination of wares which may be broadly termed Euboeo-Cycladic may not have been inconsiderable, but we can have no good reason for believing that any of the northern Cyclades was in such a commanding position in the early eighth century as to initiate such an enterprise as the foundation at Al Mina. It is to the northern Cyclades that the early pottery from Al Mina has generally been attributed for reasons based largely on incomplete comparative evidence. Geographically the islands depend on Euboea, and Strabo's record of Eretria's dominion over 'Andros, Tenos, Keos and other islands' is most plausibly to be referred to the eighth century. It is, after all, the period in which the Euboean states held a dominant position in Greek affairs, enjoyed (if we are to believe some) extensive trade and military alliances, and led the Greeks to colonize in the west. For this there is literary evidence enough. The undertaking at Al Mina escaped the attention of ancient historians, and the stories of its foundation are best attributed to the Greek Mycenaean town which may have been established there or at Sabouni.¹⁵² The later Greek town there has been proved by excavation to have been no less important a project than that of the earliest western colonies. It was even earlier than any of them. It occurred not so very long after the end of the Ionian Migrations which established (or re-established) Greek cities on the Asia Minor coast and adjacent islands, but, unlike them, it represented a deliberate

¹⁵² Above, n. 32.

attempt to tap the markets of the east. We need hardly be surprised at indications that it was the work of those states whose initiative in the west a generation later is well attested. With them at Al Mina were representatives of the younger East Greek states, though they were not necessarily partners in the original foundation. From such an enterprise must have arisen the alliances of Eretria with Miletus, Chalcis with Samos, which were not easy to understand as long as there seemed no common ground for trading or other interests.

The silence of ancient historians may arise from the fact that the foundation of Al Mina was, unlike that of the western colonies, earlier than the introduction of the alphabet and the possibility of written records, but not so old as to have become incorporated in the heroic or epic tradition. The foundation of Al Mina belonged rather to the period of the later migrations to Asia Minor—still prehistoric in the true sense of the word. The Ionian states were to flourish and remember; the founders of Al Mina were soon to suffer near-complete eclipse, while the town itself suffered a break in the continuity of its Greek history when it fell under Assyria and admitted only Cypriots. In the seventh century it is the Eastern Greeks who have the controlling interest in Al Mina, and there is only some Corinthian pottery to suggest the presence of mainland Greek traders or goods.

In the west a similar review of the archaeological evidence in favour of Euboea leads to conclusions which are readily acceptable in the light of the literary evidence. Cycladic and Boeotian elements detected in the earliest Greek pottery from western sites are better referred to Euboea. Cycladic participation in the early Euboean ventures is not disputed; Sicilian Naxos betrays it by its name,¹⁵³ and we know of Euboean dominion in some of the Cyclades. But there is no need to look for any individual Cycladic initiative in the early foundations, for which the literary, and now the archaeological, evidence can agree in giving Euboea priority. There is even less to be said for Boeotian participation.

From the distribution of the early Euboean or Euboeo-Cycladic pottery in the west one point of interest emerges. A particularly strong Euboean element can be detected in some Late Geometric vases found in Etruria, so much so that the work of Greek craftsmen may well be suspected. The proximity of Euboean foundations at Cumae and Pithekoussai is probably responsible for this, and Euboean and Corinthian must share the responsibility for the partial hellenization of art in Etruria at this time.

It is not yet possible to distinguish with certainty Eretrian pottery from Chalcidian in this period, so no deductions can yet be made from the archaeological evidence about the relative importance and influence of the two Euboean states in east or west.

The Alphabet

Archaeological evidence suggests that it was some time in the eighth century that the Greeks adopted the characters of the Semitic alphabet and adapted them to suit their own language, thus bringing to an end some four centuries of general illiteracy.¹⁵⁴ It must have been in a place involving fairly intimate contact between the Greeks and Phoenicians that they came to realize its value; the alphabet could hardly have arrived as a casual import with Phoenician traders or

¹⁵³ See above, p. 9; F. Bilabel, *Die ionische Kolonisation* 224 f.; Dunbabin, *The Western Greeks* 11 and 38: 'The cities of Euboea drew for the man-power of their colonies on the Cyclades and perhaps Boeotia, and probably carried the Boeotian and Cycladic vases common in the west in the eighth century, rare after the Lelantine War distracted both Khalkidians and Eretrians from the western colonial areas.' With this I would agree, with the proviso that any Cycladic

or Boeotian vases which there may be in the west cannot yet be distinguished from what is probably Euboean.

¹⁵⁴ W. F. Albright in *The Aegean and the Near East* (*Studies presented to Hetty Goldman*) 162: 'toward the end of the ninth century or more probably in the first half of the eighth'. On the earliest Greek inscriptions see Boardman, *BSA* xlix (1954) 183-5.

craftsmen. Al Mina (Posideion) is the most substantial Greek outpost on Semitic soil which we know to have flourished at the time of the adoption of the alphabet, and it is hardly unreasonable to suppose that it was the Greeks of Al Mina who first learned and used it.

In the argument set out above it has been suggested that Al Mina was founded towards the beginning of the eighth century by Euboeans who were, probably not from the start, joined in the venture by colleagues from the East Greek states. If indeed the Euboeans are in large part responsible for the introduction of the alphabet to Greece, we might expect to find in the Euboean alphabet some primitive features which, as *πρῶτοι εὕρηται*, they might preserve, and which other pupil-states might have simplified or adapted. Two Euboean letter forms seem to afford evidence for such a survival. The first is the five-stroke *mu*, close counterpart to its Semitic equivalent; it is characteristic of the archaic Eretrian alphabet, and is one of the Euboean features of the abecedaria introduced to Etruria from the Euboean colonies. The second is the 'Attic' *lambda* (v), again close to the Semitic character, shared by the early alphabets of Eretria and Chalcis, and learned from them by Athens, though other states preferred the inverted form of the letter (λ). We have unfortunately no very early inscriptions from Euboea which might help to demonstrate these primitive characters at a period closer to that at which they were first adopted, but in view of the general dearth of eighth-century material from Euboea this is hardly surprising. But again the Euboeans in the west can help to reflect what was current in their homeland. Cumae, the earliest Euboean colony in the west, was largely responsible for the introduction of Hellenic art to Etruria, and some vases and motifs which seem peculiarly Euboean have been pointed out above. It has been recognized that the early abecedaria from Etruria derive from the Euboean alphabet in much the same manner,¹⁵⁵ and particularly noteworthy are the five-stroke *mu* and the Attic *lambda*.¹⁵⁶ The broken *iota* does not appear in the abecedaria or in the inscriptions from Euboea, which are all much later, although it too is a primitive form, close to its Semitic original and used in most other early Greek alphabets. In Crete it appears together with the five-stroke *mu*, and Crete must be considered also an early exponent of the new alphabet. This is hardly surprising in view of the close contacts with the Near East apparent in Late Geometric Cretan art. It is, however, not yet possible to say to what extent Cretans may themselves have joined in ventures like that at Al Mina. There is hardly anything at Al Mina which need be Cretan, although this is no argument against their possible participation. A complete assessment of Cretan interest in other parts of the Greek world and outside it in this period has yet to be made, and much of the archaeological evidence has yet to be published.

Herodotus (v. 57–58) tells us that it was the Phoenicians who came with Kadmos who taught the Greeks their letters. Among them were the Gephyraeans who accompanied him to Boeotia and settled at Tanagra. They were subsequently ousted by the Boeotians and moved to Athens where the family settled, eventually to give the city her tyrant-slayers. From what we now know of the origins of the Greek alphabet it is clear that Herodotus' story is in part based on a true tradition, although Kadmos and the actual immigration of Phoenicians to Greece must remain suspect.¹⁵⁷ The 'Phoenicians' and Gephyraeans are rather those Greeks who had no doubt lived a while in the Near East and had returned to teach what they had learned there, including the alphabet. Just as, on archaeological rather than literary grounds, we have suspected the Euboeans to have done. The Gephyraeans themselves, as Herodotus admits, say

¹⁵⁵ Cf. R. Carpenter, *AJA* xlix (1945) 456.

¹⁵⁶ Useful tables of comparative Semitic and early Greek alphabets, including the Etruscan abecedaria, in H. L. Lorimer, *Homer and the Monuments* 130 f.

¹⁵⁷ Strabo 447 speaks of Kadmos with Arabes in Euboea; perhaps a confusion with Abantes. And cf. J. Day, *AJA* xlii (1938) 125.

that they came originally from Eretria, and we may perhaps accept the family's account of its own origins, and still retain the essence of Herodotus' story.¹⁵⁸

The 'Lelantine War'

There is little that can be added to the literary evidence for the war between Eretria and Chalcis generally known as the 'Lelantine War'. In view, however, of the vague and sometimes conflicting nature of the literary evidence, it is perhaps worth while to indicate what else might be relevant. This will concern the motive, the outcome, and the conduct of the war.

Herodotus (v. 99) and Thucydides (i. 15) are presumably speaking of the same war when they tell of the dispute between Eretria and Chalcis which split Greece into rival camps. They do not speak of the motive for the struggle, but Strabo¹⁵⁹ and Plutarch¹⁶⁰ imply that they fought for the plain of Lelanton, and the occasion is generally thought to be the same as that recorded by the earlier historians. The plain lies immediately to the east of Chalcis and ends by the time that about half the journey to Eretria is done. It is geographically Chalcidian territory and so must always have been for as long as Chalcis was any sort of power.¹⁶¹ If possession of the plain was the objective, we can only conclude that Eretria was the aggressor, and it is important to remember that possession of the plain meant virtually possession of Chalcis. But it is difficult to believe that the possession of a handful of vineyards in what amounted to Chalcis's back garden could be the prime motive for a war between two such powerful states, and it seems improbable that there were in fact rich iron and copper mines there.¹⁶² The excuse it may well have been, and no doubt the scene of much of the fighting; but these close neighbours, who were also partners in trade and colonizing in the west, and perhaps in the east, might easily be roused by commercial jealousies to seek individual supremacy. In Euboea the struggle would develop between the two cities in the only area available for open manoeuvre. Elsewhere the war might be reflected in disputes between allies of either party, particularly involving the East Greek states who were earlier associated with the Euboeans in developing trade with the east through Al Mina.

For the outcome of the war a recent assessment presents a fairer interpretation of the evidence than that of most writers who have simply given Chalcis the victory. 'Eretria suffered no lasting damage, and her allies in the East gained from the war, but Chalcis won at least one important victory in Euboea, and with her ally Corinth she secured the upper hand in the west' (A. Andrewes, *The Greek Tyrants* 40). The one important victory is the occasion from which hitherto Chalcis's utter defeat of Eretria has been deduced. It appears in Plutarch (*Mor.* 760-1) and tells of the help given Chalcis by the Thessalian Kleomachos against the Eretrian cavalry, and its

¹⁵⁸ If the Gephyraeans are a Euboean family, one would prefer, in view of their name, to think of them as Chalcidian rather than as Eretrian. In fifth-century Athens a one-time Euboean family might understandably prefer an Eretrian ancestry to a Chalcidian one, Chalcis having been humbled by Athens a generation earlier, Eretria heroically martyred by the Persians.

¹⁵⁹ 448; cf. Schol. ad Thuc. i. 15.

¹⁶⁰ *Comm. in Hes.* 36 (quoted by Proclus); *Mor.* 153. Lines of Theognis (891-4) which have been associated with the war mention the plain, but neither Chalcis nor Eretria are named, only Kerinthos, another Euboean state. E. Will (*Korinthiaka* 391-404) is more optimistic, reconciles Theognis with 'probabilities', and brings the main conflict into the sixth century. The other evidence may be circumstantial, but it does at least mention Chalcis and Eretria and on the

whole points to an earlier date. D. W. Bradeen in *TAPA* lxxviii (1947) 223 ff. gives a useful account of the sources. His explanation of Euboean alliances (p. 236) is, however, weak as Samos and Aegina could hardly have been trade rivals in Egypt before the second half of the seventh century, which is when the archaeological evidence shows that the Greeks had reopened regular trade with Egypt. The Euboean-Ionian venture at Al Mina gives the ground for the alliances and allows a much higher date for them. W. G. Forrest's account in 'Colonisation and the Rise of Delphi' (*Historia* vi (1957) 160-75) develops and modifies Burn's and Blakeway's attitude to the date of the war and the allies involved; the remarks on the dating are important.

¹⁶¹ Strabo 447; the plain ὑπέρεκεται Chalcis. See A. Philippson, *op. cit.* i. 2, 605 f., 673.

¹⁶² Strabo 447; O. Davies, *Roman Mines in Europe* 244.

successful outcome. The war was at a climax. Aristotle is also cited as an authority for Kleomachos' intervention, but Plutarch's object in this passage is not to tell of the war between Chalcis and Eretria but to give an illustration of the martial qualities of paederasty. To refer the incident to the 'Lelantine War' seems reasonable, as no other major conflict involving overseas allies is recorded. But we are not bound by Plutarch to suppose that Chalcis was the victor in more than the encounter or season which involved the Thessalians; certainly not that she was the ultimate victor, if there is other evidence which suggests the contrary, as does the archaeological.

So far the mass of archaeological evidence from the sites of Eretria and Chalcis is heavily overbalanced in favour of Eretria in the eighth and seventh centuries B.C. However, a comparison between the positive evidence afforded by Eretria and the suggestions prompted by the scrappier finds at Chalcis does allow of some tentative conclusions about the relative prosperity of these states in this period.

By the end of the eighth century there had been established in Eretria a distinctive local tradition in vase-painting owing much to the mainland schools and akin to the Cycladic. This tradition continues, distinctive though undistinguished, throughout the seventh century and well into the sixth century without any interruption. At Chalcis we have the evidence of occasional finds in the area and of the comparatively rich selection of fragments published above. These finds show Chalcis using the distinctive Euboean vases until around 700 B.C., rather as Eretria. No pottery of the middle or later seventh century has been found, and when in the mid-sixth century some black-figured pottery appears, it seems provincial Attic or Boeotian with none of the distinctive and traditional peculiarities found at that date in Eretria. If we are forced to assess the historical value of this evidence, admittedly barely adequate so far as Chalcis is concerned, the most satisfactory explanation would be that Eretria enjoyed continuous prosperity from the eighth to the sixth century with no alarming disasters or change of population; that Chalcis early in the seventh century fell from prosperity, and was perhaps in part abandoned—at any rate suffered some loss of status in comparison with Eretria.¹⁶³ One might further deduce that Eretria, her close and powerful neighbour, was the cause of this eclipse.

The relative successes of allies in east and west need have no direct bearing on the outcome of the fighting in Euboea, although, if individual disputes can certainly be associated with the Euboean war, they might help to suggest a more accurate date for it. The circumstances of the known alliances help to build a plausible picture of alliances or trade leagues associated with either Eretria or Chalcis. But to explain records of dispute in the early archaic period between any opposed pair of possible allies as the immediate response to a difference between the Euboean cities is to make the conduct of the war rather like a game of American football, in which opposed players tackle each other at the sound of the whistle regardless of whether either is in possession of the ball.

Renewed colonizing activity by Chalcis at the end of the war (if it is indeed in the eighth century) might as well be explained as the inevitable result of the loss of home territories, as by an access of prosperity. Had she been successful, the ground won in Euboea might have served her surplus population; not that either victor or loser in such a war could be expected to have much of a surplus of male citizens at the end of it.

Finally, the manner of fighting in the war has excited some speculation, as ancient authors were free in their remarks about Euboean military method, and most of such remarks have been attributed to the period of the 'Lelantine War'. Archilochus, our earliest authority who may

¹⁶³ Partial abandonment of the site is possible. This might explain the apparent absence of seventh-century

pottery, and the presence of what might be plausibly called Chalcidian in Etruria.

refer to the war, speaks of the δεσπότες Εὐβοίας δουρικλυτοί (fr. 3) fighting in the plain and preferring the sword to slings and arrows.¹⁶⁴ We cannot be sure that he is referring to the 'Lelantine War' rather than some skirmish. If we could, this might be a useful chronological pointer. If we knew the date of Archilochus, that is. Jacoby brings his *floruit* down to the mid-seventh century and prefers to dissociate fr. 3 from the 'Lelantine War' entirely; 'we cannot date him from the war, or the war from him'.¹⁶⁵ The rejection of long-range weapons does at least agree with the stele which (or, a copy of which) Strabo saw at the sanctuary of Artemis Amarysia, near Eretria, recording an agreement between Eretria and Chalcis not to use τηλεβόλα. Hand-to-hand fighting with a sword is heroic and aristocratic, but the sword is also the hoplite's secondary weapon. Euboean prowess with the hoplite's primary weapon, the thrusting-spear, is attested in the *Iliad* (ii. 543-4).¹⁶⁶ So far there is at least the suggestion of hoplite tactics. But it is Eretria's cavalry which Chalcis fears most in Plutarch's account, and Aristotle (*Pol.* 1289b) singles out Chalcis and Eretria (with the Magnesians and other eastern states) as being ἐπὶ τῶν ἀρχαίων χρόνων oligarchies with their strength in cavalry which they employed against their neighbours, i.e. against each other. The cavalier aristocracies of the Euboean states are well attested otherwise, and, though a cavalryman might carry thrusting-spear and sword, it is difficult to reconcile all the ancient testimonies. To add to the confusion, we may adduce the archaeological evidence of a Late Geometric vase of little before 700 B.C. It was found at Eretria, and, though painted in a very Attic manner, it was probably made there.¹⁶⁷ On it a file of warriors each carry two spears (probably throwing-spears; not hoplite) and a shield with a blazon (most probably hoplite).¹⁶⁸ 'Transitional' is the term of explanation which comes most readily to mind when the evidence, both literary and archaeological, is so conflicting. It may even be correct and support the view that fighting in Euboea was protracted. It might even be that two phases or separate conflicts should be distinguished: an earlier aristocratic and cavalier war in which Chalcis, with Thessalian help, was successful; and a later, hoplite war leaving Eretria the victor. The earlier might belong to the years following the joint enterprise at Cumae (about 750). The episode at Corcyra in which the Eretrians were in 733 expelled by Chalcis's allies, the Corinthians, might be a repercussion or consequence of this; certainly after this Eretria has no further influence in the west and her only other colonies are sent to northern Greece. The years after the mid-eighth century would also be close in time to the period of archaeological ties between Thessaly and Euboea, that of the pendent-semicircle skyphoi which seem not later than the middle of the century. It might even be that this conflict was the occasion for the abandonment of Amarynthos, Old Eretria, and the exploitation of the later site. The later phase of the war would be of the earliest years of hoplite fighting in Greece, around 700, and might even be the first demonstration of it. The extent to which Euboean interest in Al Mina and the metal-working cultures of the Near East might have encouraged adoption of the new armour and tactics in the island cannot yet be assessed. It would not have been the first time that Greece had learned new styles in warfare from the east, and the later reputations of Euboeans, and of Chalcidians in particular, as inventors of the bronze panoply lends colour to the suggestion.

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¹⁶⁴ Quoted in Plut. *Thes.* 5 where the Abantes are called πολεμικοί καὶ ἀγχιμάχοι καὶ μάλιστα δὴ πάντων εἰς χεῖρας ὡθεῖσθαι τοῖς ἐναντίοις μεμαθηκότες.

¹⁶⁵ *CQ* xxxv (1941) 97-109, and cf. A. Bonnard, *Das Altertum* iii (1957) 13; Forrest, op. cit. 163 f.

¹⁶⁶ Cf. H. L. Lorimer, *BSA* xlii (1947) 114, 121; *Homer*

and the Monuments 208.

¹⁶⁷ I give some reasons in *Eretria* 7; it is illustrated *ibid.* pl. 3A, and in *AE* 1903, 13 f., fig. 7.

¹⁶⁸ S. Benton has pointed out in *BSA* xlviii (1953) 340 that a charged shield needs to be a hoplite shield, i.e. one which has a top and bottom and cannot be inverted.

THE PATRAI OF KAMIROS

IG xii. 1. 695; *T. Cam.* 1.¹ In the British Museum, from Kamiros. Early third century B.C.

I	II	III
		[---] [-----]οι [-----]δειοι [...]ιοι [Α]νδρώνειοι
5	5 [---] [---]ρειοι [....]λέων πάτραι [Θ]αρσαγ[ό]ρειοι Βωλαιο[νίδ]αι	5 Δεξιωνίδαι Εὐρυθεμίοι Δαμητίδαι Λυκώνειοι Τιμοκρίτειοι
10 [---] [---]ξειοι [.....]ξειοι [....]λέων πάτραι [Φ]ιλοκικυδίδαι Χαρμυλιώνειοι	10 Ἀριστο[τι]μίδαι Ἀλθαίμε[νίδ]ος Ἀμφινέων [πάτρ]αι Εὐτελίδ[αι] Ἀμφινεῖς	10 Ποιμανόρειοι Πυλλωνέων πάτραι Μαιωνίδαι Μελάνδρειοι Εὐωνακτίδειοι
15 Κοσμόλαιοι Μορμάδαιοι Μειδίαιοι Ἀριστάρχαιοι Ἀλθαίμενιδος	15 Ναινίαιοι Κρινίαιοι Κλευγένειο[ι] Εὐανόρειοι Χυτρίων πάτραι	15 Τιμοφίλαιοι Ἀγαθοβουλίδαι Νικώνειοι Βουκολέων πάτραι Κρητινάδαι
20 Ἀμφινέων πάτραι Ἴπποτάδαι Γραιάδαι Θωιάδαι Θωιάδαι	20 Ἴφικλίδαι Χαριδαμίδαι Καλλιδάμειοι Θαρσιάδαι Κρητινάδαι	20 Δωριάδαι Ἀγησιδίκοι Μειδαγόρειοι ///////// Ἀριστο[τι]μ[ίδ]αι
25 Θωιάδαι Θωιάδαι Θαρσίλαιοι Χυτρίων πάτραι Κρητινάδαι	25 Μητύλαιοι Κρητινάδαι Ληχείων π[άτραι] Κλ[-----] [---]	25 Κρα[-----] [---]
30 Βουκολίδ[αι] Βουκο[λίδ]αι Βον[κολίδ]αι [---]		

¹ *Tituli Camirenses*, edd. Segre and Pugliese Carratelli, *Annuario* N.S. xi-xiii (1949-51) 141 ff., with a supplement, *ibid.* xiv-xvi (1952-4) 211 ff.

Recent discussions include: Hiller von Gaertringen, *RE* suppl. v. 771 (1931); A. Momigliano, *Riv. Fil.* lxiv (1936) 59-60; M. Guarducci, *Mem. dei Lincei* vi. 8 (1938/9) 95 ff.; G. Pugliese Carratelli, *Studi class. e orient.* i (1951) 85-86. Earlier literature in H. Van Gelder, *Geschichte der alten Rhodier* (1900) 227.

This article could not have been written without the generous assistance of Mr. P. M. Fraser, who put at my disposal his collection of Rhodian material and patiently discussed the question with me. He would date the inscription to the earlier part of the third century, rather than to the fourth. I have also gained much from discussing with Mr. W. G. Forrest a parallel case at Chios to be published in a later volume of *BSA*.

Guarducci, *Mem. dei Lincei* vi. 8 (1938/9) 124, no. xxix bis; *T. Cam.* 2. Kamiros.

[- - -]
[. .]ντ[- - -]
Κρητιν[άδαι]
Κλονιάδ[αι]
Τρυηίδ[αι]
5 [Α]νδρο[- - -]
[- - -]

THESE lists present an organization at three levels:

(a) The smallest units are *patrai*, with names ending either -δαι or -ειοι, rather more of the latter than the former; the only exception is II 14 Ἀμφινεῖς.

(b) These are grouped under headings, Χυτρίων πάτραι (I 28, II 19), Βουκολείων πάτραι (III 18), &c. The general term for the bodies named Χυτρίοι, &c., is not given.

(c) The heading Ἀθθαμενίδος at I 19, II 11, embraces several of these second-level groups. At two removes above the *patrai*, Ἀθθαμενίς must be a large body, something like a tribe, and the termination -ίς is common in tribe-names.

Among the puzzling features of the list is the repetition of certain names, either consecutively in the same group or from one group to another, thus:

Θωιάδαι: I 23-26 under Ἀμφινέων πάτραι.

Βουκολίδαι: I 30-32 under Χυτρίων.

Κρητινάδαι: I 29 under Χυτρίων; II 24, 26 under Χυτρίων; III 19 under Βουκολείων; *T. Cam.* 2. 2 in a different sequence with no heading preserved.

Ἀριστο[τι]μίδαι: II 10 under [. . .] λέων: the gap seems to demand a wider supplement, e.g. Ἀριστο[δα]μίδαι. At III 24 Pugliese Carratelli restores Ἀριστο[τι]μ[ίδαι]: in this case the gap seems to be of the right width, but the restoration might equally well be Ἀριστο[τί]μ[ειοι]. Probably not a repetition.

Ἀνδρώνειοι: III 4 with no heading preserved; in *T. Cam.* 2. 5 Guarducci suggested the restoration [Α]νδρῶ[ν]ειοι, but [. .]νδρῶ[- - -] allows many alternatives (we have only the top curve of the last letter), and it is to be noted that the certainly repeated names all end -δαι not -ειοι.

No wholly satisfactory explanation of these repetitions has been given, and I have none to offer here; but the fact that Κρητινάδαι appear under more than one heading carries implications which it is, nevertheless, worth while to follow out. Briefly, it suggests that we have here not the original *patrai* of Kamiros but a system which is the result of deliberate reorganization. It is hardly possible to believe in the independent development of five or more distinct units all called Κρητινάδαι without qualification,² and it seems an inevitable conclusion that these are fractions of a single parent body with this name. If so, the division of this body and the distribution of its fractions must be a deliberate act of reform.

The original Κρητινάδαι were probably a *patra*.³ Kinship groups at this level survived and flourished in hellenistic Rhodes, whereas the only trace of a phratry in any period is the third-century horos, *Lindos, Inscr.* ii. 615 Γρεννάδων⁴ | Ἀθάνας Φρατρίας, and there is no trace at all of kinship tribes, though the presence of the old Dorian tribes at Akragas is some indication that they had once existed in Rhodes, as we should expect from the record of other Dorian

² But cf. Guarducci (see previous note) 97.

³ If they were a phratry, one would expect their subdivisions to be *patrai* with names of their own.

⁴ Γρεννάδαι are known as a Lindian *patra*, *ibid.* 391. 27, 392. a 10, b 13.

settlements.⁵ This decay of the upper levels of the kinship structure is paralleled at Athens, for which we have more copious information. There the old Attic tribes survived only tenuously into the fourth century; phratries, which in the fourth century were still active bodies, declined and vanished during the hellenistic period; but the *gene*, or some of them, lasted on to be cultivated in Roman times for their social prestige.

If an original *patra* was subdivided into five or more new *patrai* distributed under different headings, then the reorganization was carried out on some principle other than that of pure kinship, since in a kinship structure all Κρητινάδαι should come under the same heading. Probably, then, the grouping of these new *patrai* had a geographical basis or one connected in some way with the demes and tribes of the city. At Kamiros as at Lindos there is clear evidence of a system of three tribes each composed of a group of demes⁶ and based presumably (like the somewhat similar tribes instituted by Kleisthenes at Athens in 507) on the place of residence of the members at the time when the system was created.

Ἀλθαίμενις may well be one of these tribes, for the two assumptions involved are neither of them difficult. (a) The intermediate groups Χυτρίειοι, &c., which certainly are not demes,⁷ must be artificial links between gentilicial *patra* and residential tribe, bringing together in one group all those new *patrai* whose members lived in, or were connected with, a particular area. (b) For this to be possible, Kamiran *patrai* must have been fairly compact bodies with a strong local connexion, so that four sections of Θωιάδαι fell into the group Ἀμφινεῖς and at least three of Βουκολίδαι into Χυτρίειοι; and three sections of Κρητινάδαι were connected with the area indicated by Χυτρίειοι while one fell into Βουκόλαιοι and one perhaps elsewhere. (For the organization of a local unit within a Lindian *patra* cf. Maiuri, *Nuova Silloge* 18. 22–23, discussed below, p. 35.) This is no longer closely parallel to the situation at Athens, where the *gennetai* were already widely scattered in residence by Kleisthenes' time, though some (perhaps all) phratries were closely connected with a particular locality.⁸

The two forms of name exhibited by the new *patrai* probably indicate origin in different periods.⁹ The early history of the termination -δαι needs more attention than it can be given here, where it need only be said that collective names in -ίδαι, -όδαι, though absent from the Mycenaean documents and Homer, certainly began early and in the classical period conveyed the idea of descent from a common ancestor; also, that new formations of this type are rare after the archaic period.¹⁰ The adjective in -ιος or -ειος has a longer history and a wider range of use. Mycenaean Pylos, like classical Thessaly, used it to indicate the name of a man's father where

⁵ On the Dorian tribes at Rhodes, see Hiller, *op. cit.* 741; Momigliano 61; Pugliese Carratelli, *Parola del Pasato* iv (1949) 154; and others. It is of course possible, though not specially probable, that the Ὑλλεῖς of Akragas were inherited from the Cretan colonists of Gela.

⁶ Fraser, *Eranos* li (1953) 39–40.

⁷ With the publication of *T. Cam.* we can speak with more assurance about Kamiran demes; see Pugliese Carratelli, *Studi class. e orient.* vi (1956) 62ff.

⁸ Cf. Guarducci, *Mem. dei Lincei* vi. 6 (1937) 22–23.

⁹ Van Gelder, Hiller, and others maintain that the names in -ειοι are of Aeolic form. Apart from the general improbability of this (we should have to suppose that more than half the Kamirans of the third century exhibited this and only this Aeolic habit), it is to be noted that the Thesalians and others, though they use the adjective in -ειος, -αιος with individual names to indicate a man's father, turn to the ordinary Greek form in -δαι when they want a

collective name for a family group, as Skopadai or Aleuadai in Thessaly, Penthilidai or Kleanaktidai in Mytilene.

¹⁰ The most illuminating discussion is by Wilamowitz, *Ar. u. Ath.* ii. 180–5; cf. also Ernst Fraenkel, *RE* xvi. 1636; I have not seen Ciardi-Dupré, *Nota sui nomi greci in -δαι* (Florence, 1903). So many Mycenaean names are now known that the absence of place-names in -δαι and personal names in -δαι must be regarded as significant (Ventris and Chadwick, *Documents* 94, and the indexes). There are few collective names created between Πεισιστρατίδαι and Σελευκίδαι, and even these as ruling houses may be regarded as exceptional; conditions did not favour the creation of new and continuing family units. Βουσελιδῶν μνημα in [Dem.] xliii. 79 is an exception, but this family conspicuously did not hold together and neither Isaios xi nor [Dem.] uses Βουσελιδαι collectively for its fourth-century members. Comic formations like Ἐρμοκοπίδαι are another matter. It is to be noted that some early formations, e.g. Πραξιεργίδαι, can hardly be literally patronymic.

most Greeks put this name in the genitive, but collective plurals with this termination and a personal name as base are very rare in the early period compared with those in -δαι.¹¹ In the classical period the plural is widely used to mean the followers, or the like, of the person from whose name it derives, as Πυθαγόρειοι or Βρασιδείοι.¹² This was the simple way of expressing relation between a group and an individual, and hellenistic Rhodes was full of associations with names of this form, either double (or multiple) names like Ἀσκληπιασταὶ Νικασιώνειοι where the first gives the deity worshipped and the second the founder or the leader of the association,¹³ or single names like Λυσιμάχειοι where the nature of the association and its connexion with a Lysimachos is not made clear; some of the latter names might be the names of *patrai* like those of our inscription.

It can safely be said that the names in -δαι are in fact older, and would be taken as genuinely patronymic: these then will represent the original Kamiran *patrai*, subdivisions of phratries (if that was their name in Rhodes) which were divisions of the old Doric tribes. Ἀμφινεῖς (II 14) probably belongs to this category too:¹⁴ the Mycenaean documents show a strikingly high proportion of names in -εὺς in comparison with later Greek (Ventriss and Chadwick, 100-1), and the termination is common in forming adjectives from place-names, many of which must be early. The names in -εῖοι are later formations; the relation of, for example, Μειδίεοι (I 17) to a Meidias is not self-evident, but the appearance of so many of these names beside the older ones rather suggests that a large body of new and artificial *patrai* was created at the time of the reorganization, in which case Meidias was probably contemporary with it and simply the senior member of the group, however formed. Perhaps the Kamirans at this time decided that all citizens alike were to be members of theoretically equal *patrai*, or perhaps for some religious purpose they wanted a larger number of *patrai* than they had. The required result was achieved by subdividing the larger *patrai* like Θωιάδαι and Κρητινάδαι; by leaving intact the smaller existing *patrai* like Ἱπποτάδαι and Γραιάδαι (I 21-22) whose names are not repeated in the inscription; and creating, or admitting to equal status, a relatively large number of groups with names of more modern formation.

If some *patrai* had to be subdivided, it was probably one object of the reform to obtain units of roughly equal size. If Ἀλθαίμενις is one of the three tribes of the city, another object was to fit the *patrai* into the framework of these tribes. This involved the creation of artificial links between them, the second-level headings, of which six are wholly or partly preserved. Of these, four end in -εῖοι, but only one of them, Βουκόλαιοι, can be connected with a series of normal personal names (Βούκολος, Βουκολίων): contrast this with the *patrai* in -εῖοι, where in spite of one or two oddities (I 16 Μορμάδαιοι, II 15 Ναινίεοι) almost all come from known or even common personal names.¹⁵ Ἀμφινεῖς (I 20, II 12) is taken from a constituent *patra*: compare the Kleisthenic reform at Athens, in which many of the *trittyes* (also artificial links) take their names from constituent demes which are presumably older. [...]λέων is not drawn from a constituent recorded in cols. I or II, and one can only note that the termination seems to be of the same kind

¹¹ The Αἰάντριοι of the Lokrian maiden-inscription (third century: recent text of face A in Buck, *Greek Dialects* (1955), no. 60) are presumably an old formation. Κυδαντέριοι in an early inscription of Axos, now lost (*IG* ii. v. 9.12), might be the name of a hereditary group, cf. Guarducci ad loc.

¹² Πυθαγορείοις in Herod. ii. 81. 2 is probably masculine (cf. Morrison, *CQ* n.s. vi (1956) 136) and the earliest example; Βρασιδείοι, Thuc. v. 67. 1, &c. In these names the α of the stem is neglected, as in our inscription, whereas in Thessalian patronymic adjectives it is still regularly respected in hellenistic times, e.g. Buck no. 33 (Larisa,

second century B.C.) ταγεύοντων Κρίτουρος Παισανιαῖοι κτλ.

¹³ Cf. Pugliese Carratelli, *Annuario* n.s. i-ii (1939-40) 188-9, and the list of Rhodian associations, *ibid.* 176-86. The man who gave his name to the association sometimes appears beside it in the same inscription.

¹⁴ There was a group of some kind, probably not a *patra*, with the name Ἀμφινεῖς at Troizen in the second century B.C. (*IG* iv. 757, B 29).

¹⁵ But not the commonest names of hellenistic Kamiros, see p. 36 below.

as that of Ἀμφινεῖς. So far as the names are preserved, they convey no very clear impression of their origin,¹⁶ but again, names in -εῖοι are not likely to be very early.

In the late inscription *T. Cam.* 88. 2-4 the honorand is described as

[τειμαθεῖσαν ὑπὸ Κ]αμειρέων πάσαις ταῖς τε
[μαῖς καὶ ὑπὸ τῶν σ]υννομᾶν καὶ πατρῶν τῶν ἐν
[Καμείρῳ πάσαις] ταῖς τιμαῖς.

Συννομᾶν and πατρῶν are governed here by the same article and qualified alike by the addition τῶν ἐν Καμείρῳ. The connexion between them is evidently close; it naturally occurred to the original editor, Jacopi (*Clara Rhodos* vi-vii (1932-3) 429), that *synnoma* might be the missing title for our groups of *patrai*, and this is probably the case.¹⁷ Jacopi derived it from a system of community of pasture among family groups; Hiller von Gaertringen (*Gött. Gel. Anz.* 1934, 195) noted that some of their names could be connected with pasturage (see n. 16) and added that these 'Weidegemeinschaften' had a good antique sound; Guarducci (see p. 30, n. 1) preferred human σύννομοι in aristocratic associations like the Cretan ἑταιρεῖαι, not kinship groups in origin but assimilated to the kinship organization. Neither derivation is impossible, but equally there is no reason why the name should not be late and artificial, a verbal noun of συννέμειν, the *patrai* being grouped together, συννενημένοι.

There seems to have been a similar reform at Lindos, where the term *synnoma* also occurs, with another technical term *diagonia*.¹⁸ The evidence is as follows:

(a) *Clara Rhodos* ii (1932) 175, no. 4, and *IG* xii. 1. 922, are both decrees of ἡ διαγόνια ἡ Ἀγητοριδᾶν.

(b) *Clara Rhodos* ii (1932) 203, no. 36. 2-3:

καὶ ὑπὸ
[διαγ]ονίας τᾶς Θυμοτερπιδᾶν.

(c) *Annuario* N.S. i-ii (1939-40) 166, no. 19. 29:

καὶ ὑπὸ Οἰβαλιδᾶν δ[ι]αγονίας.

(d) *Ibid.* 39:

[καὶ] ὑπὸ τᾶς διαγονίας τᾶ[ς - - -].

(e) *Lindos, Inscr.* i. 219. 7-9:

ὑπὸ τῶν διαγωνιᾶν τᾶ[ν . . .]ωταδᾶν¹⁹
Ἀστυκρωντείων καὶ Στρασ[ι]ωνείων
καὶ Αὐτοσθενείων.

¹⁶ Βουκόλαιοι might be connected with ancient pasturage-rights (see next paragraph, on *synnomai*): Χυτρίλαιοι sound more like potters. Occupational names of various kinds, together with a much larger number of names of other types, are found among the Attic *gene* and elsewhere. It is clear that no conclusion about the general character of such a system can be drawn from one or two of the names within it, disregarding the rest.

¹⁷ Pugliese Carratelli, *Studi* (see n. 1) 86, objects that the two bodies would not be named side by side in this manner if one were a constituent of the other. If the text before us were the text of a decree passed (for example) by a single *synnoma* and one or more *patrai*, this would be a solid objection; but in a summary list of honours on a statue-base we may expect magniloquence rather than strict logic. The

language links these bodies closely; it would be equally, or even more, appropriate if both were constituents of a larger whole, like γενῆται and ὄργεῶνες within an Attic phratry; but this is not the situation which *IG* xii. 1. 695 presents. Since in fact we have here bodies of unknown name containing (so far as the evidence goes) only *patrai*, it is more economical to accept Jacopi's conjecture and call the larger bodies *synnomai*.

¹⁸ *Diagoniai* are discussed by several writers among those cited in n. 1, but only to note that the term is unknown elsewhere and evidently refers in some way to a connexion of kinship.

¹⁹ Blinkenberg restored [Ἀλ]ιωταδᾶν, but in view of the multiplicity of names in -δαί it seems better to leave this blank.

(f) Maiuri, *Nuova Silloge* 18. 20–23:

καὶ ὑπὸ Ἀλιαταδᾶν πατριωτᾶν
Ἀριστοκλείων καὶ Κυδαγορείων διαγωνιᾶν κοινοῦ καὶ ὑπὸ
Ἑπεκτοριδᾶν πατριωτᾶν κοινοῦ καὶ ὑπὸ Εὐθαλιδᾶν πατριωτᾶν
τῶν ἐν Οἴαις κοινοῦ.

(g) *Lindos, Inscr.* ii. 454. 8–9:.

καὶ ὑπ[ὸ τᾶν ἐν Λίνδῳ]
συννομᾶν καὶ διαχ[ονιᾶν].

(a)–(d) all show single *diagoniai*, with the three preserved names ending -δαί. (e) gives us three *diagoniai* with the termination -εἰοί as constituent parts of a body called [...]ωτάδαί. In (f) two *diagoniai* in -εἰοί appear as parts of a *patra*; then another *patra*, apparently undivided; then a local division of a third *patra*—all the *patrai* ending -δαί. (g) shows *synnomai* and *diagoniai* at Lindos in the same relation as *synnomai* and *patrai* at Kamiros, again in a very late period. But an important inscription of the second century B.C., *Annuario* N.S. i–ii (1939–40) 157, no. 18, B 12, shows a *synnoma* with the name Τρι[...] as a body with premises of its own and therefore some effective existence. Other named *patrai* of Lindos are Γρεννάδαί (n. 4 above); Παγκιάδαί (*Annuario* N.S. i–ii (1939–40) 166, no. 19. 21); Δρυῖται (*IG* xii. 1. 88. 6, *Lindos, Inscr.* i. 146. 7), sharing their name with a Lindian deme; and perhaps Τραγαδίται (*Lindos, Inscr.* ii. 648. 2), who are given no title but elect a priest of Zeus Patroos. The last two names may easily be as ancient as those in -δαί. There are no known Lindian *patrai* ending -εἰοί.

Comparing this with the situation at Kamiros, we may suppose that the Lindian reform produced a hierarchy of tribes divided into *synnomai*, subdivided in their turn into *diagoniai*. A *patra* which was comparatively small became a single *diagonia*, as in (a)–(c) with their relatively old names; a larger *patra* was divided into several *diagoniai* with modern names, as in (e)–(f). This seems the simplest hypothesis, though it involves supposing that (f) is looser in its terminology than the other examples: the Ἑπεκτορίδαί ought perhaps to be called a *diagonia* as in (a)–(c), and perhaps also the Εὐθαλιδαί of Oiai. The reform differs from the Kamiran in that a new name was found here for the smallest units whereas Kamiros confusingly reused the term *patra* for what were in most cases new units; and in that Lindos does not show a large number of new-formed *diagoniai* with modern names corresponding to the new Kamiran *patrai* in -εἰοί. But this is not the only instance in which Lindian procedure differs from Kamiran.

The hypothesis outlined above would not solve all the difficulties of the Kamiran inscription:

(i) The duplication of headings between cols. I and II is not accounted for. It does not at first sight seem likely that these headings were repeated again in col. III, for if they were they must have come much higher or lower than the corresponding headings in I–II.²⁰ But this may have been the case. Unless the *patrai* of III stood outside the tribal system indicated by the heading Ἀλθαίμενιδος in I–II, we should expect to find the same tribal headings in III, and in that case the heading Ἀλθαίμενιδος must have come considerably higher or lower in III than in I–II.²¹ But if the three columns had each the same system of headings, we still have no

²⁰ The headings of II are 5–9 lines higher than the same headings in I. The discrepancy for III would be greater: in detail, if the heading Ληλείων πάτραι occupied the line above the first surviving line of III, it would be 27 lines above the same heading in II; if [...]λέων πάτραι came immediately below the last line of III, the difference would

be 18 lines between II and III, 13 between I and III. (In these counts, the erased line III 23 is not treated as a line.)

²¹ Eleven lines difference between II and III, and 19 between I and III; or 14 and 5 respectively.

idea why there had to be three columns;²² or if we accept Hiller's suggestion (ll.c.) that in I-II one column gives the *patrai* on the island and the other those of the Peraia,²³ we leave the status of III extremely obscure.

(ii) The repetitions of Θωιάδαι, &c., from which this argument began, still seem unreasonable, for it cannot have been convenient to do without distinctive names for the fractions of these old *patrai*. It might be suggested, as an alternative, that the list gives some kind of rota in which Θωιάδαι as a body took four turns consecutively to perform a sacrifice or appoint an official or the like;²⁴ but against this is the appearance of Κρητινάδαι under Βουκολείων as well as Χυτρίων (the Κρητινάδαι as a whole can hardly be a *patra* of both groups), and the fact that *diagoniai* in Lindos clearly sometimes result from the division of an older body (cf. (e)-(f) on pp. 34-5 above).

Until these puzzles are solved, no unsupported deduction from IG xii. 1. 695 can have much value. My present speculation, supported to some extent by the evidence from Lindos, still needs a word about the date of the supposed reform at Kamiros. The simple answer, that the reform and the inscription were contemporary, would present us with the problem why Kamiros should take so much trouble about her *patrai* at so late a date, more than a century since she had ceased to be an independent state. The names of the *patrai* in -εἰοι suggest that the reform was in fact a good deal earlier. Mr. Fraser points out to me that the personal names on which they are based are not at all characteristic names for hellenistic Kamiros. Thus for twenty-four well-preserved *patrai* only six exactly corresponding names can be found in the indexes of *T. Cam.* and the supplement;²⁵ four *patra*-names find no support at all,²⁶ and others very little; while many common Kamiran names, and types of name, are not represented among our *patrai*.²⁷ Thus the persons who gave their names to the new units appear not to have been contemporary with the inscription but to belong to another period when Kamiran habits of nomenclature were different; and if so, the reform itself is probably earlier than the hellenistic age.

But having gone this far, it is not easy to proceed farther. It would help if we could determine the date when Kamiros abandoned the old Dorian tribes, for the *patrai* must once have been units of phratries (or the like) inside these tribes, whereas Ἀλθαίμενις is a later phenomenon. Many Greek states changed kinship tribes for some system of local division, some very early (e.g. Sparta and Megara), some later (e.g. Athens in 507, or Tenos in the third century), but Argos and Epidauros retained the Dorian tribes in name at least into the hellenistic period (cf. Busolt, *Gr. Staatskunde* i. 257 ff.), and in the Rhodian area itself we find ὑπὸ φυλετῶν Δυμᾶ-
[v]ων in an inscription of Kedreai (Fraser and Bean, *Rhodian Peraea* 45, no. 42. 7) of the second century B.C., long after Rhodes had changed:²⁸ analogy is no help here. The fact that Kamiran and Lindian tribes are based on demes may suggest that Athens was directly their model, and

²² But cf. the Τοττειδῶν δευτέρων of Chios (see n. 1 above).

²³ The tribes of Kamiros, unlike those of Lindos, are made up of mainland as well as island demes (Fraser, l.c.), and the list of κτοῖναι whose inscription is ordered in IG xii. 1. 694 was to include those from the mainland.

²⁴ The repeated names are sometimes consecutive (I 23-26) and sometimes not (II 24, 26), which might mean that the order in which the names were listed was significant for the purpose which the list served. (The Chian lists (n. 1) usually put the older names in -δαι at the top, which is not the case with the Kamiran *synnomai*.)

²⁵ Ἀρίσταρχος for I 18, Κρίνις II 16 (the rarity of the name makes this interesting), Εὐάνωρ II 18, Λύκων III 8, Τιμόκριτος III 9, Νίκων III 17.

²⁶ I 16 Μορμάδειοι, I 17 Μειδίειοι, II 15 Ναινίειοι, II 25

Μητύλαιοι.

²⁷ At least thirty-five names in Ἀριστ-, with over 200 examples between them, but only four Ἀρίσταρχοι (and one Ἀριστότιμος, relevant if III 24 should read Ἀριστο[τί]-μ[ε]ιοι). The many names in Τιμ- contain only one Τιμόκριτος (two Τιμάκριτοι), and the many in Ἀγησι- no Ἀγησίδικος: the only -δικος is Εὐρύδικος (four examples), which is also the only Εὐρυ- name to help out III 6 Εὐρυθεμίειοι. Thirty-one names in -αγόρας (over 100 examples) show no Θερσαγόρας or Μειδαγόρας. None of our *patrai* come from names beginning Δαμ- or ending -κλῆς, -κράτης, -στρατος, which are common in *T. Cam.*

²⁸ Kedreai was not Rhodian in 404 (Xen. *Hell.* ii. 1. 15), nor perhaps earlier (Fraser and Bean 97); we do not know when it was acquired by Rhodes.

Athenian influence was very strong in the period of the fifth-century empire, as is shown by the prescript of the Lindian decree republished by Accame, *Clara Rhodos* ix (1938) 209;²⁹ and it was also strong after Konon's intervention and the democratic revolution of 394: either of these periods would be suitable.

It would help again if we had any clue to the purpose of the reform. If the point was to include all Kamirans in *patrai* (p. 33 above), then these *patrai* could have served like the Athenian phratries as a check upon enrolment in the demes. In the state of Rhodes after the synoecism of 408, Kamiros formed one of the three tribes of the state, Κάμρις: membership of this depended on membership of a Kamiran deme (and this carried with it membership of one of the Kamiran tribes, which existed concurrently with the Rhodian tribes), so that a check on deme-membership would serve an intelligible purpose—but this is a mere guess, and does not fully apply in the case of Lindos, where the demes of the Peraia were not included in the Lindian tribes. The reform must have served some purpose, since the *synnomai* still operated at Lindos in the second century, and were still capable of honorary decrees both at Lindos and at Kamiros in the imperial period. On the other hand, Lindian *patrai* continued to have a corporate existence even after they had been divided into *diagoniai*. This last fact may give some comfort to those historians who rate very highly the conservatism and tenacity of such bodies as *patrai*, but on the whole the reform rather demonstrates how malleable a system could be even if its original bond was kinship.

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²⁹ If the tribes were reformed in the fifth century, they will have needed some adjustment later, for a few small communities paying their tribute separately to Athens and therefore at that time somehow distinguishable units (*ATL*

i. 513) were fully absorbed by the three cities later, after the synoecism: there would be no difficulty in adjusting the tribal system to include them.

A MYCENAEAN CHALICE AND A VASE PAINTER

(PLATE 8)

THE vase which is discussed below was brought to the British Museum for identification by the late Mrs. Maitland Sikes in 1951,¹ together with other vases of Cypriote manufacture, and eventually it has been placed on loan in the Museum. Its provenance is unknown, but its Cypriote companions and the nature of its form and decoration, as it will be discussed below, speak in favour of Cyprus.²

(PLATE 8a.) *Fabric*: buff-pinkish clay, good quality 'Mycenaean'. Surface covered with a smooth buff-pinkish slip; decoration in brown to dark brown lustrous paint.

Shape: deep bowl, slightly concave sides, carinated profile; long cylindrical stem, disk-shaped foot with deep depression at bottom. Almost half of the cup and part of the foot are missing and have been restored in plaster.

Diam.: 10.2 cm.; height: 24.5 cm.

The inside of the cup is left blank except for a painted horizontal band just below the rim. The outside surface is decorated with horizontal bands encircling the cup, stem, and foot; thin horizontal lines encircle the lower half of the cup. The upper half is decorated with a frieze of identically repeated bull protomes, looking right. Three protomes survive and the horns of a fourth, but originally there must have been six. The space between them is filled with dotted circles.

Comparatively recent excavations have brought to light a number of vases of this form: four from Ras Shamra³ and three from Tell-Abu-Hawam.⁴ Stubbings has already observed the peculiar character of this form and suggested a Cypriote manufacture for all these chalices.⁵ None has so far been found in the Aegean and it may well be another specifically Levanto-Mycenaean form.⁶ A somewhat parallel form in the Mycenaean repertory is, of course, the stemmed kylix, but there are differences between the two, the main one being that the kylix is always handled whereas the chalice is handleless.⁷ Usually the bowl of the kylix is rounded; it is true, however, that occasionally angular (carinated) bowls occur, but they are never so deep and narrow as those of the chalices.⁸

The angular profile of the bowl and the nature of the form in general suggest a metallic prototype, but no such metallic chalice has so far been found, either in the Aegean or in the Levant. The 'Nestor's cup',⁹ however, and the silver chalice from Dendra¹⁰ may help to

¹ The writer's thanks are due to Mr. R. S. Sikes, who generously allowed publication of this vase which is now his property, to Messrs. D. Haynes and R. Higgins of the British Museum for their kind co-operation and assistance, and to the Trustees of the British Museum for the photographs (PLATE 8). The vase is now exhibited in the British Museum, King Edward VII Gallery, together with other Mycenaean vases from the Aegean and the Levant.

² The only reference so far to this vase has been made by F. Stubbings in a footnote of his book *Mycenaean Pottery from the Levant* (1951) 87, n. 2.

³ C. F. A. Schaeffer, *Ugaritica* ii (1949) fig. 127, 14, 15, 17, 18; Stubbings, op. cit. pl. xvi. 12.

⁴ R. W. Hamilton, *QDAP* iv (1935) 45, 280, pls. xvii.

280, and xxii. o, p; Stubbings, op. cit. pl. xvi. 8.

⁵ Stubbings, op. cit. 87.

⁶ For other specifically Levanto-Mycenaean forms see Stubbings, op. cit. 38 ff., fig. 8; E. Sjöqvist, *Problems of the Late Cypriote Bronze Age* (1940) 66 ff.; A. Furumark, *The Mycenaean Pottery, Analysis and Classification* (1941) 66 (hereafter *MP*).

⁷ Cf. Furumark, *MP*, figs. 16-18.

⁸ Furumark, loc. cit. types 261, 267.

⁹ G. Karo, *Die Schachtgräber von Mykenae* (1930), pl. cix, no. 412.

¹⁰ A. Persson, *New Tombs at Dendra near Midea* (1942), fig. 117.

reconstruct the metallic prototype, which must have been common, but has not survived, like so many metallic forms from the Late Bronze Age.¹¹

Furumark rather overlooked this form, because at the time he was writing only a few fragmentary specimens from Tell-Abu-Hawam were known, and he was not even absolutely certain whether they had any handles or not.¹² He discussed these chalices in a footnote of his *magnum opus*, associating them with Oriental prototypes, and he referred to them again¹³ when interpreting the vase forms painted on a Mycenaean crater-fragment from Enkomi (BM C339).¹⁴ He very rightly associates vase no. 4 on the fragment with the chalice form, but states with emphasis that this vase form and all the rest represented on the crater fragment are decidedly non-Aegean, and that they all have counterparts in the Near East.¹⁵ The present writer, however, believes that this statement may not be entirely correct as regards both the other forms¹⁶ and that of the chalice.¹⁷ There exist other similar chalices, and representations of similar, though not identical, chalices, in the Aegean arts and crafts, which have been discussed at length by Evans.¹⁸ It must be emphasized, however, that though the origin of the form may be sought in the Aegean rather than in the Orient, its ceramic version is confined to the Levantine region. This phenomenon, however, is not unusual. The metallic prototype of the Mycenaean amphoroid crater is known only from very scanty remnants, while that of the jug with angular shoulder (another specifically Levanto-Mycenaean form)¹⁹ has not survived at all.

The decoration of the vase is important: first because this is the only case so far known of a chalice decorated with a figured representation, secondly because it has been possible to trace the painter who decorated this vase and two other Mycenaean shallow bowls, one (BM C672) found at Klavdia, Cyprus²⁰ (PLATE 8 *b*), and the other at Minet-el-Beida.²¹ In all three cases the painter's motive is the same, a bull protome of a stylized form, almost identically reproduced. The head is rather schematically drawn; most of it is occupied by a huge eye, whereas the muzzle is far removed from nature. When compared with other bull protomes, e.g. Furumark's Motive 3: 16, 17,²² they are found to lack naturalism and grace; their whole appearance is rather awkward, and their drawing unskilful; their painter has for this reason been characterized as an 'unskilful imitator' of the Protome Painter.²³ There is no doubt that an absolute comparison of the two will prove the art of the Protome Painter superior, especially his ability and skill in figure drawing. The present writer, however, believes that there is a difference in their stylistic ideas, which is due to a certain chronological distance between the

¹¹ It is obvious why bronze vessels have survived only in very small numbers from antiquity. It is very characteristic that from the bronze vessels of the Late Bronze Age in Cyprus, which have so much influenced local Cypriote forms, only scanty remains have survived.

¹² Op. cit. 64, n. 2.

¹³ Op. cit. 436, n. 3.

¹⁴ Op. cit. 435, fig. 75.

¹⁵ Op. cit. 436.

¹⁶ A brief reconsideration of these forms here may not be wholly out of place. For his vase no. 1 cf. a fine Cretan jug recently discovered at Katsamba, near Knossos (St. Alexiou, *Κρητικά Χρονικά* vi (1952), pl. A). There is another fragment from the same crater now in the Cyprus Museum with a representation of the upper part of the same vase, which helps to reconstruct the whole form: it is in fact identical with the jug from Katsamba. For other similar forms from the Aegean, cf. Evans, *Palace of Minos* ii. 653; iv. 452 ff. (hereafter *PM*).

For his no. 2 cf. the conical rhyton which is common in the Mycenaean repertory (Furumark, *MP*, fig. 20, type

199).

For his no. 3 cf. Mycenaean bowls with a high vertical loop handle (*ibid.* type 253).

His no. 5 may well correspond to the Mycenaean open crater with vertical strap handles. The pointed base may be due to the inaccuracy of the drawing of the forms.

¹⁷ There is a certain similarity between the Mycenaean chalice form and the 'fruit-stands' from Beycesultan, Turkey (Seton Lloyd and James Mellaart, *Anatolian Studies* v (1955) 55, fig. 6, pls. iii*b*–iv*a*), but it would be unnatural to suppose that the one influenced the other (*op. cit.* 54).

¹⁸ A. Evans, *PM* iv. 2, 390 ff., figs. 325–9.

¹⁹ Stubbings, *op. cit.* 39, fig. 8*k*; see also discussion on a similar jug from the G. G. Pierides Collection, V. Karageorghis, *Syria* xxxiv (1957) 82 ff.

²⁰ *CVA* Gr. Brit. pl. 17, 13; Stubbings, *op. cit.* pl. xii. 2.

²¹ Schaeffer, *op. cit.* pl. xxix, bottom left; Stubbings, *op. cit.* pl. xvi. 1.

²² Furumark, *op. cit.* 248, fig. 28.

²³ S. A. Immerwahr, *AJA* lx (1956) 138.

two. The Protome Painter (to be called hereafter Protome Painter A) belongs to the end of the period of traditional pictorial decoration in vase painting. He decorates bell craters²⁴ or even the outside surface of small bowls with whole bull figures.²⁵ It is half-way through his career that he discovers the motive of the bull protome. At the beginning he is uncertain about its use and inserts it rather unskilfully as a space-filling motive side by side with whole bull figures.²⁶ In his later works, however, he makes a very satisfactory use of the bull protome and exploits all the advantages which it offers.²⁷ This was a time which saw serious changes in the tendencies of pictorial vase painting. It coincides with the appearance in the Mycenaean repertory of types of shallow bowls with horizontal loop handles, a specifically Levanto-Mycenaean form,²⁸ which opened a new field in vase decoration. This new form required innovations; the obvious space for pictorial decoration in such vases is the inside of the bowl, which offers a more or less even surface, whereas the outside surface does not do justice to pictorial representations. The Mycenaean vase painter chose the frieze decoration as best suited for the circular surface of the shallow bowl. Structurally he conceived this space as consisting of concentric bands or zones which could be filled with decorative motives either abstract or pictorial. Such zones, however, the one inserted inside the other, could create a decorative effect only if they were filled with repeated motives, in order to retain the conception of the vase surface as a series of circles. This has been admirably achieved by the Mycenaean vase painters, who produced a series of such bowls with highly decorative qualities.²⁹ Lozenges, circles, spirals, and other similar motives were extensively used. When pictorial motives were used they usually filled only one circular zone, but had to conform to the tendencies of the new style. Fishes, birds, and animal protomes³⁰ were obviously more suitable for such a decoration than other larger or complicated pictorial motives.³¹

The Protome Painter B (as it is proposed to call hereafter the painter of the kylix and the two shallow bowls) simplified even further the motive of the bull protome which he inherited from the Protome Painter A, gave it an almost abstract character, and used it as a decorative motive. In all three of his works dots give an embroidery-like quality to the decoration;³² they are used either inside the outlined motive itself or in circles symmetrically arranged between the protomes. The drawing of the bull protome motive on all three vases is strikingly identical; small differences in detail, e.g. the different filling pattern inside the protomes on BM C672, and the absence of ears on the protomes of the same, do not alter the identification of the painter, but illustrate further his method of work.³³

The frieze of bull protomes on the chalice is highly decorative and marks its superiority over the other known chalices. Far more satisfactory, however, is the decoration of the shallow bowls, for which the new tendency in pictorial decoration was intended. The repeated curves of the outlined figures and their symmetrical arrangement create a rhythmic composition full

²⁴ S. A. Immerwahr, *AJA* lx (1956) pl. 53, figs. 6-7.

²⁵ Ibid. pl. 53, fig. 8.

²⁶ Ibid. pl. 53, figs. 6-7.

²⁷ Ibid. pl. 54, figs. 10-12.

²⁸ Stubbings, op. cit. 8d.

²⁹ Cf. *ibid.* pls. xii. 1-12, xvi. 1-6; *CVA* Gr. Brit. pl. 16, 19-23, 25, 26. Occasionally, however, the rotating arrangement of motives was replaced by a radiating arrangement, but in both cases the conception of the circle was maintained, cf. Stubbings, op. cit. pls. xii. 7, 11, xvi. 2, 4.

³⁰ Ibid. pl. xii. 1-2, xvi. 1, 3; *CVA* Gr. Brit. pl. 16, 22; V. Karageorghis, *Δελτίον Κυπριακών Σπουδών* 1957, pl. iv, nos. 44, 55; Schaeffer, op. cit. fig. 126, 2; H. B. Walters, *Catalogue of the Greek and Etruscan Vases in the British Museum*

i. 2 (1912) 131, fig. 257.

³¹ It is important to note that even such simple motives have been simplified and reduced, e.g. Walters, loc. cit.; Schaeffer, loc. cit.

³² Cf. similar embroidery qualities on Pierides bowl 55, Karageorghis, op. cit. pl. iv, no. 55.

³³ Cf. views expressed by this writer with regard to recognition of individual vase painters, *AJA* lx (1956) 147. One could easily compare the methods of a present-day cartoonist with those of a Mycenaean vase painter; they both create their repertory of standard motives and figures, which they can draw without much effort and in a short time. These may be easily attributed to the hand that made them.

of whorling movement. The imperfections in the figure drawing are unnoticed and the general impression from the composition as a whole is one of rhythmic movement combined with pleasing effects in the decoration.³⁴

On the Ras Shamra bowl, however, the painter, through miscalculation of his space, broke the symmetry and rhythm of the composition; having drawn four bull protomes all round the inside zone he found that between the last and the first protomes there was more space left than between the others, and to remedy this he inserted another small protome which, however, spoiled the effect of the whole arrangement.

The Protome Painter B should not be considered as an untalented imitator of the Protome Painter A. As already stated, there may be between them a short interval of time during which the new stylistic tendencies in pictorial vase painting, coinciding with the appearance of shallow bowls, were born and developed. If one is to date the Protome Painter A to the middle of the thirteenth century, perhaps the third quarter of the same century would be an appropriate date for the Protome Painter B.³⁵ He is by no means inferior to the other contemporary painters, together with whom he gave a new lease of life to pictorial vase painting toward the end of the Late Mycenaean IIIB period.

The present writer will not hesitate to locate the atelier of this artist in the Levant, and most probably in Cyprus. It is not accidental that all three works so far known from the hand of this painter are of specifically Levanto-Mycenaean forms. Furthermore, his style is in perfect accord with what is known as the Levanto-Mycenaean pictorial style of the Late Mycenaean IIIB period.³⁶ Indeed even staunch supporters of a mainland origin for the Mycenaean pictorial vases have made a special concession with regard to this painter,³⁷ and regard him as having his atelier in the Levant. With this concession, however, one has now to admit also that perfect Mycenaean fabrics, like that of the chalice discussed above, could be manufactured in the Levant.

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³⁴ See Karageorghis, *Δελτίον Κυπριακών Σπουδών* 1956, 5 ff.

³⁵ It is interesting to note that the excavator of Tell-Abu-Hawam has given his Mycenaean chalices a date commencing c. 1230 B.C. (R. W. Hamilton, *op. cit.* 46).

³⁶ It is true that the bull protome is used once as a pictorial motive on a Mycenaean bowl from the Argive Heraeum (Waldstein, *The Argive Heraeum* ii (1905) 91, fig.

19); the style, however, and the figure drawing imitate a Levantine prototype. It is characteristic that even the finder of the fragment mistook the motive for a fish(!) (*op. cit.* 91).

³⁷ Immerwahr, *op. cit.* 140; cf. also her n. 24, where doubts are expressed even for the location of the atelier of the Protome Painter.

THE AEGINA TREASURE RECONSIDERED¹

(PLATES 9-15)

PRELIMINARY

THE Aegina Gold Treasure in the British Museum has always been something of a mystery, because no other ancient jewellery has been found sufficiently like it to give any indication of its date or its fabric. At the time of its first appearance it was generally regarded as Late Mycenaean (i.e. L.H. III).² More recently there has been a tendency to put it in the seventh century B.C.,³ and one scholar even sees it as Phoenician.⁴ The Greek archaeologist Stais, moreover, held from the start that it was not a homogeneous deposit, but a mixture of Mycenaean and later elements.⁵ The time is clearly ripe for a thorough re-examination in the light of present archaeological knowledge.

What, in fact, do we know of the circumstances of its discovery? It was offered to the British Museum in 1891 through the agency of a member of a firm of sponge-importers, and was said to have been recently found in a tomb in Aegina. Although no other details were disclosed, this find-spot is inherently reasonable, since Aegina was at that time the centre of the Greek sponge trade. The Museum bought the Treasure in the following year, and in 1893 Evans published it, but could give no further details.⁶ Indeed, he implied that since the export of all antiquities from Greece was illegal, the jewellery must have been secretly excavated and smuggled out of the country, and nothing more would ever be known. It was, however, believed in Aegina that it had been found near the town of that name in a Mycenaean tomb in a vineyard on Windmill Hill, to the east of the so-called Temple of Aphrodite (see FIG. 1).⁷ Stais, writing in 1895, accepted this story in its essentials, but, since he held on stylistic grounds that only part of the Treasure was Mycenaean, was forced to the conclusion that a genuine Mycenaean tomb-group had been supplemented by extraneous elements. He adds in explanation that the man who sold the Treasure and claimed to have discovered it was known to buy anything offered him, whether coming from clandestine excavations or from chance discovery.⁸ Keramopoulos in 1904 undertook an excavation in the vineyard on Windmill Hill and uncovered four Mycenaean chamber-tombs, three intact and one rifled, of L.H. IIIB date (thirteenth century B.C.).⁹ He suggested that the rifled tomb had contained the Treasure. Unfortunately, no traces of it were found in the tomb, nor did the other three tombs yield anything comparable. There is, however, some evidence that he had identified the right tomb in the presence in Oxford of four Mycenaean vases said to have been found with the Treasure, which are of roughly the same date and of the same character as those from the Windmill Hill tombs.¹⁰

¹ This is the expanded text of a lecture delivered at a meeting of the British School on July 9th, 1957. A preliminary version was published in *BICS* iv (1957) 27 ff. I am grateful to Sir John Forsdyke, Mr. Sinclair Hood, and my colleagues in the Greek and Roman, Western Asiatic, and Egyptian Departments of the British Museum for much valuable help. For permission to publish photographs I am indebted to the Trustees of the British Museum (PLATES 9-14, PLATE 15 *a, d, g, h, i*, and FIGS. 1-4), Librairie Orientaliste Paul Geuthner, Paris (PLATE 15 *c, e, f*), and Editions 'Cahiers d'Art', Paris (PLATE 15 *b*).

² Evans, *JHS* xiii (1892-3) 195 ff.; Marshall, *BMC*

Jewellery xix; Myres, *Antiquity* 1951, 70. For his remarks about associated pottery, see n. 10.

³ Becatti, *Oreficerie Antiche* 38 (hereafter = Becatti); Demargne, *La Crète dédalique* 126.

⁴ Lorimer, *Homer and the Monuments* 71.

⁵ *AE* 1895, 252.

⁶ Loc. cit.

⁷ Stais, loc. cit.; Keramopoulos, *AE* 1910, 178 and 183. The temple is now believed to belong not to Aphrodite but to Apollo.

⁸ Loc. cit.

⁹ Op. cit. 183. For the date, see Furumark, *Chronology* 66.

¹⁰ Ashmolean Museum nos. *AE* 299-301. They were bought in 1893 from a member of the firm of sponge-

In July 1914 an old lady wrote to the British Museum a letter which confirms the accepted story. She states that in the summer of 1891 a certain sponge-dealer in Aegina, to whose family she was governess, brought to England and sold to the British Museum 'treasures found in an



FIG. 1. THE CHAMBER TOMBS ON WINDMILL HILL. THAT ASSOCIATED WITH THE TREASURE IS ALMOST CERTAINLY ONE OF THE SEVEN INDICATED WITH A CROSS. (Adapted from *AA* 1938, 511, fig. 25.)

old tomb of a priestess of the Temple of Venus . . . I believe treasures consisting of gold rings, bracelets, pieces of cornelian, jade and glass beads'. The wife gave her 'two pieces of cornelian with the carved fingers on it . . .'. She also said that much pottery was found in the tomb, but was not brought to England. As a result of this letter the Museum bought from her the two cornelian beads and eight other pieces of jewellery, all of which belonged unmistakably to

importers through whom the Treasure had reached the British Museum in 1891. Although the Register only says 'from a tomb in Aegina', Sir John Myres (in a letter about the Treasure) writes: 'The associated pottery was acquired by Sir Arthur Evans, and is in the Ashmolean Museum . . . My own information was from Sir Arthur Evans about the

time of its arrival at the Ashmolean.' This can only refer to these four vases, and it explains Myres's remarks (*loc. cit.*) about the association of Mycenaean pottery with the Treasure. The vases appear to be transitional L.H. IIIA-B.

the Treasure.¹¹ The 'old tomb of a priestess of the Temple of Venus' is clearly the tomb near the Temple of Aphrodite.

Harland, who was in Aegina in 1920-1, writes: 'The very place where the "treasure" was discovered has been pointed out to me by an old inhabitant of Aigina, and the device resorted to by the finder in order to conceal his digging has also been explained to me. If this evidence is trustworthy, then the gold ornaments came from one or possibly two graves. And since this spot is in the midst of the "Mykenaian" or Late Helladic cemetery, it seems to me that the grave and the "Gold Treasure" should be dated in the Late Helladic Period. . . .'¹² Welter, in 1938, has more to say.¹³ He states that the Treasure was found roughly buried (*verscharrt*) in a hole in the corner of a rifled Late Mycenaean chamber-tomb on the southern slopes of Windmill Hill; this can only be Keramopoullos's tomb. He goes on to say that it must therefore be the cache of a tomb-robber, and suggests that it may not come from an Aeginetan cemetery at all. Stais, Keramopoullos, Welter, and the old lady were all in a position to know the facts, and Harland appears to have stumbled independently on the same story; we may consequently accept their evidence, so far as it goes, with some degree of confidence.

There is thus enough circumstantial evidence to establish beyond reasonable doubt that the Treasure was discovered in 1891 in a tomb of L.H. IIIB date on Windmill Hill. But, even before considering the objects themselves, we are faced with several suspicious factors which argue against a normal burial. First, if it was a normal burial, and if Keramopoullos, as seems probable, found the right tomb, he would inevitably have come upon fragments at least of jewellery left by the robbers in the hasty and furtive operations demanded by tomb-robbery. Secondly, the circumstances of the discovery as recorded by Welter give rise to suspicions that all was not as it should be. Thirdly, the propensity of the discoverer, as noted by Stais, to buy antiquities indiscriminately is in itself somewhat disquieting. And in the fourth place, the failure of Welter and of others before him to find any comparable material anywhere in the island gives grounds for his suggestion that the Treasure does not come ultimately from an Aeginetan cemetery at all.

In view of these suspicious circumstances the tomb, however well attested, cannot be used to provide trustworthy evidence for the date, nor any *prima facie* grounds even for assuming a homogeneous deposit. It will therefore be necessary to re-examine individually the objects which make up the Treasure, in order to determine their date and fabric. From this it should be possible to ascertain the nature of the Treasure itself. It may, however, be remarked at the outset that enough is now known about Late Mycenaean, Orientalizing Greek, and Phoenician jewellery to make it reasonably certain that the Treasure will turn out to be none of these things.

Note on chronology. The accepted sequence-dates M.M., L.M., &c., are frequently unsuitable (a) for dating without differentiation between Crete and the Mainland or even between different parts of Crete, or (b) for presenting a straightforward chronology without reference to pottery. In consequence, an absolute chronology has been attempted, but the accepted sequence-dates have been used in addition where their meaning is unambiguous. The chronology, which may be regarded as reasonably certain for the periods under review, is based on Platon in Zervos, *L'Art de la Crète* 509, and Hutchinson, *Antiquity* 1954, 155.

THE TREASURE ITSELF

The Treasure consists of the following gold objects: seven elaborate pieces of jewellery, part of an eighth and probably parts of a ninth; fifty-four disks; three diadems; a number of plain

¹¹ A gold bead now part of 758 A; four green jasper beads now part of 754 A; two cornelian beads now part of 756 A;

and three cornelian beads now part of 760 A.

¹² *Prehistoric Aigina* 24.

¹³ *Aigina* 55, 118.

bands; a bracelet; five finger-rings; five plain rings; beads and pendants of various forms; and a cup. There are also beads and pendants of lapis lazuli, cornelian, rock-crystal, amethyst, and green jasper. It was first published by Evans in 1893¹⁴ and later by Marshall in 1911.¹⁵

1. *BMC Jewellery* no. 762 (PLATE 9 a-b).¹⁶ A gold ornament, 6 cm. high, composed of an upper plate of sheet-gold worked in repoussé and backed by a flat sheet of gold. The two plates are folded together. A man stands, his body facing the front, legs in profile to the right. In either hand he holds by the neck a bird, probably a goose, and behind him are two objects of the kind which Evans called snake-frames.¹⁷ The birds appear to be standing on the snake-frames and pecking at their ends. The snake-frames rest on three lotus-flowers springing from upturned portions of a horizontal ground-line, on which the man stands. He wears a tall ornamental head-dress, probably of feathers, large circular ear-rings, spiral bracelets on his wrists and upper arms, a tightly fitting tunic, shorts, and a tight belt with an embroidered end hanging down in front. From the relief hang five gold disks, decorated in a system of raised dots forming a circle with a central point and attached by a long 'tail' made in the same piece and wound round itself to make a loop.

A hole runs sideways along the top of the head-dress, so that the piece could hang from a cord or a wire. To judge from the flat back, it was intended to rest against the body of the wearer, perhaps from the top of a pin.¹⁸

Stylistically, there are no really close parallels, but an ornament from the Third Shaft Grave at Mycenae is sufficiently like it, although without the disks, to suggest a date not too far from 1550-1500 B.C.¹⁹ Moreover, the association of a repoussé front with a flat back is paralleled in the gold cups from the Vapheio Tomb of much the same date. A study of the details makes possible a closer dating. Three, or possibly four, separate parallels from the communal tomb of Chrysolakkos at Mallia suggest strongly that this is Middle Minoan work, probably of 1700-1550 B.C. (M.M. III).²⁰ The first is a gold lotus-flower, which is closely related to the three incorporated in this piece (FIG. 2).²¹ The second is the system of pendant disks on the famous jewel in the form of two confronted bees or hornets (PLATE 15 e).²² The third is a gold pendant in the shape of a leaf, which stands very close to the disks here, both in the system of decoration and in the nature of the loop for suspension (FIG. 3).²³ The fourth consists of two damaged gold disks, which may well have been of this form.²⁴ Apart from the Treasure and the examples just quoted, pendant disks of this nature are extremely rare.²⁵ One occurs at Mochlos and should probably be dated about the twentieth century B.C.²⁶ Three hang from a gold ornament in the

would give a seventeenth-century dating for the Chrysolakkos gold.

²¹ Demargne, *Mallia: Nécropoles i (Études crétoises vii)* 56, pls. 22 and 67, no. 588. (Hereafter = Demargne.)

²² Demargne, 54, pl. 66, no. 559.

²³ Ibid. 53, pls. 22 and 67, no. 562.

²⁴ Ibid. pl. 65, the two (unnumbered) below no. 564.

²⁵ I do not include gold disks pierced twice and connected by loops of wire. This appears to be a later Mycenaean type. Examples are: *AE* 1888, pl. 9: 9; Persson, *Royal Tombs at Dendra* pl. 27 and p. 41, no. 3. *JHS* xxiv. 323, no. 4905 (from Mycenae, L.H. II) is not illustrated nor described in detail, but apparently belongs to this later type.

²⁶ Seager, *Mochlos* fig. 43, xix. 19 (hereafter = Seager). The tombs from which most of the jewellery came probably all belong to the last centuries of the Early Minoan period, say, 2200-1900 B.C.

¹⁴ *JHS* xiii. 195 ff.

¹⁵ *BMC Jewellery* xviii, and 51, nos. 683-768. The rings are also catalogued in *BMC Finger-rings*, under nos. 690-3 and 888.

¹⁶ To bibliography add Holland, *AJA* xxxiii. 191, fig. 7A; Marinatos, *BSA* xlvi. 115, fig. 7; Becatti, pl. 25, no. 122; Nilsson, *Minoan-Mycenaean Religion* 2 367, fig. 177.

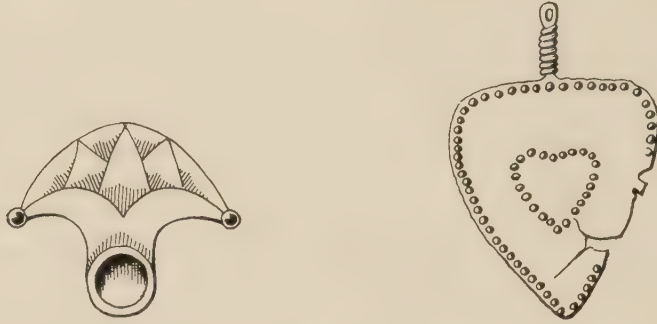
¹⁷ *Palace of Minos (= PM)* iv. 168; Nilsson, op. cit. 360; *BSA* xlvii. 275, fig. 16, iii. 20.

¹⁸ Cf. Karo, *Schachtgräber von Mykenai* pl. 30. (Hereafter = Karo.)

¹⁹ See Karo, loc. cit.

²⁰ See the four succeeding notes. Demargne dated the tomb 1900-1700 B.C. (M.M. I). Platon, however (*Heraklion Museum Guide* (1955) 96), brings its lower limit down into the seventeenth century. The gold in Minoan communal tombs tends to belong to the latest interments, since that from earlier burials was removed on later occasions. This

shape of a goat in the British Museum (PLATE 15 *h*).²⁷ It comes from Crete and clearly goes with this piece and nos. 2 and 3 below. With this find-spot it could well be Minoan, but cannot be independently dated. And finally a somewhat similar, but not identical, disk comes from an Early Helladic tomb at Zygouries, near Corinth.²⁸



FIGS. 2-3. ORNAMENTS FROM CHRYSOLAKKOS, NOS. 588 AND 562. (Redrawn from *Études crétoises* vii, pl. 22.)

A few other parallels in matters of detail suggest themselves. The man's face is like that of the faience Snake Goddess from Knossos of 1700-1550 B.C.²⁹ The head-dress is paralleled in the figure from the rather later (sixteenth-century) Priest-King fresco, and apparently echoed in Mycenaean jewellery.³⁰ The shorts are not uncommon in Minoan art. They are probably worn by the 'Priest-King'; are apparently worn by certain Middle Minoan terracotta figures from Petsophas;³¹ and are found on men on the Lion-Hunt dagger from Mycenae, of 1550-1500 B.C., and on other monuments.³² Snake-frames have not yet been identified in Middle Minoan art, but are common in the Late Bronze Age.³³

It is clear from the way he holds the birds and from the 'snake-frames' that we have here a Minoan 'Master of Animals', the less common counterpart of the popular 'Mistress of Animals'.³⁴ An earlier identification with an Egyptian fowling-scene takes no account of the purely Minoan details, and in fact the resemblance to such scenes is more apparent than real.³⁵ The presence of the lotuses would indicate that the god is also lord of vegetation. The nature of the object on which he stands, and from which the flowers spring, is not clear. Possibly he is represented as standing in a marsh, in which the lotuses are growing.

It remains to explain the disks. It is in some sense correct to derive them from the flat cut-out ornaments, frequently on chains, of Minoan art of the twentieth century; but these seldom take the form of disks, and often unmistakably represent leaves.³⁶ It is tempting to see the disks as sun-symbols, and to compare them with a Babylonian necklace of the time of Hammurabi (the nineteenth century B.C.), from which hang disks not unlike these, associated with moon-symbols.³⁷ A similar sun-disk is also found on a contemporary Babylonian cylinder-seal found in Crete.³⁸

²⁷ *BMC Jewellery* no. 815. At first sight it might be thought, from its resemblance to a piece from Ephesus (Hogarth, *Ephesus* pl. 23, 2), to belong to the seventh century B.C., but this Mesopotamian motive, never really Greek, has a long history in its homeland. *PM* iv, pl. 34, top (L.M. IA), is an earlier example from Crete. Cf. also Zervos, *L'Art de la Crète* fig. 484.

²⁸ Blegen, *Zygouries* pl. 20, 11.

²⁹ *PM* i, frontispiece.

³⁰ *Ibid.* ii. 774 ff. See also *AJA* xxxiii. 173 ff.

³¹ Pendlebury, *Archaeology of Crete* 117.

³² *PM* iv. 575, figs. 555 and 557.

³³ See p. 45 n. 17.

³⁴ Nilsson, *op. cit.* 357 ff., 513 ff.

³⁵ *JHS* xiii. 197. For instance, whatever our man is standing on, it is not a boat. And the head of an Egyptian fowler would almost certainly be rendered in profile.

³⁶ Seager, figs. 10, 11, 20, 25, and 43; Xanthoudides, *Vaulted Tombs of Mesara* pl. 57; *Ann.* xiii-xiv. 195, fig. 63.

³⁷ *Die alte Orient* xv. 64, fig. 115. For H.'s date, see *Anatolian Studies* vii. 54ff.

³⁸ *PM* ii. 265, fig. 158.

2. *BMC Jewellery* nos. 763–639 (PLATE 10 *a–b*). Four almost identical gold ornaments, 6.5 cm. wide, and possibly the remains of a fifth.⁴⁰ Made, like no. 1 above, in openwork repoussé, they differ in being reversible; the back, for they are symmetrical, is identical with the front. Within an embossed ring in the form of a two-headed snake are a pair of greyhounds face to face and, below them, a pair of monkeys back to back. The greyhounds stand with their muzzles joining, and each raises one forefoot so that the paw touches the opposing paw of his counterpart; they have separately-made collars, leads, and tails of wire, the leads being threaded through cornelian beads; below their raised forepaws is a barrel-shaped cornelian bead threaded on wire. Below, each supporting on its head a foreleg of the dog above it, sit two monkeys back to back, apparently eating. In front of each monkey is an object curving away from it, which supports the hind-legs of a greyhound. Seven circular disks and seven figures of flying owls are attached alternately by chains to the outer circumference of the ring. The owls are made in repoussé and are, like the main element, hollow and reversible. At the inner end of the chains for the owls is an elongated cornelian bead; at the outer end of every chain is a smaller spherical bead of the same material.

At first sight the ornaments appear all exactly alike, but on closer inspection they fall into two pairs, differing slightly in certain details. In nos. 763 and 766 the dogs' leads are completely obscured by cylindrical cornelian beads, striated horizontally, and the long beads attached to the chains for the owls are barrel-shaped. In nos. 764 and 765 the leads are of twisted wire for most of their length, the part next to the collar being threaded with a small spherical cornelian bead, and the long beads on the chains for the owls are club-shaped. The owls also differ slightly, those on the first pair being slightly larger and more detailed than those on the second pair.⁴¹

The technique and the pendant disks show quite clearly that these pieces go with no. 1 above. Further confirmation of this association is to be found at Chrysolakkos, where a similar gold bird was found, which the excavator independently compared with these (PLATE 15 *f*).⁴² In addition, the bee-jewel from the same site (PLATE 15 *e*) can provide two parallels in matters of detail: the heads of the bees are very like those of the monkeys, and the wire forming the legs of the bees is matched by the tails, collars, and leads of the greyhounds. The chains to which the birds and the disks are attached are not paralleled in no. 1, nor at Chrysolakkos, but similar chains are plentiful in the earlier jewellery from Mochlos and in the later jewellery from the Shaft Graves at Mycenae.⁴³ They need therefore cause no surprise in this context.

The design of these pieces is puzzling; it may perhaps go back to some Middle Kingdom Egyptian original, since a pectoral from Dahshur has much in common with them.⁴⁴ It should, however, be remarked that such an antithetic arrangement is more common in Mesopotamian than in Egyptian art. But whatever the ultimate origins of the motives employed, they have been completely naturalized. The dogs are a popular Minoan-Mycenaean breed,⁴⁵ and the monkeys back to back are known as early as the twentieth century B.C.⁴⁶ For a possible explanation of

³⁹ To bibliography add Becatti, pl. 25, no. 118.

⁴⁰ See succeeding note.

⁴¹ Most of the pendants are in their original positions, and this scheme may be regarded as certain. A few, presumably because they were found detached, have been at some time attached with cotton, not always logically so far as the owls are concerned. The present arrangement is intended to reproduce the original scheme. The second set (nos. 764 and 765) is complete. Of the first set, no. 763 now lacks one owl, and no. 766 two. An owl of the type proper to the second set was formerly attached with cotton to no. 763.

It cannot belong to the second set, which has its full complement, and almost certainly represents a survivor from another ornament of this nature. The beads listed below as nos. 21 (3 and 4) add weight to the possibility that there were originally more than four such ornaments.

⁴² Demargne, pl. 67, 3.

⁴³ Seager, figs. 10, 11, 20, 25, and 43; Karo, *op. cit.*, pl. 22.

⁴⁴ De Morgan, *Fouilles à Dahchour*, Mars–Juin 1894, pl. 19, 1.

⁴⁵ *BSA* xxxix. 66.

⁴⁶ Seager, fig. 11, II. 42b; Xanthoudides, *op. cit.*, pl. 15, no. 1026.

the pendant disks as sun-symbols, see under no. 1 above. If this identification is correct, it is tempting to see in the flying owls the attribute of another deity. One thinks of Lilith,⁴⁷ or of a Minoan goddess later to be known as Athena.⁴⁸

3. *BMC Jewellery* no. 761⁴⁹ (PLATE 11 a). A gold repoussé ornament with a flat back soldered to it, 11 cm. long. At either end of a curved plate with raised rims is a beardless head in profile. The eyes and eyebrows were originally inlaid, probably with lapis lazuli.⁵⁰ Ears and hair are rendered in great detail, the hair being combed back and terminating in two curls on the neck; they should probably be regarded as falling on either side of the head. On top of each head is a ring for suspension, and below the piece hang ten disks like those of no. 1 above, but undecorated.

The disks and the method of manufacture are evidence that this piece goes with no. 1. Its purpose also is clear; it must have been worn on the breast just below the neck, suspended by a wire, a cord, or a necklace of beads. The sex of the heads cannot be determined. Stylistically they recall heads on frescoes of the fifteenth century B.C. and later, but they have a harder outline.⁵¹ The closest parallel for the features is found on the acrobat from the famous sword from Mallia, probably of the seventeenth century B.C.⁵² (PLATE 15 c). The treatment of the hair is, however, quite different, and almost certainly due to Mesopotamian influence. The curls may perhaps denote a sphinx,⁵³ an identification supported by the forward thrust of the heads, which suggests a quadruped rather than a biped.

4. *BMC Jewellery* no. 746⁵⁴ (PLATE 9 c-d). A gold pendant, of total length 8.5 cm. The principal element consists of a lion's head rising from a circular collar, hollow and open underneath. The lion's head is worked front and back in repoussé, has two upright pointed ears, made separately, and is pierced on either side for suspension. The collar is decorated in filigree with circles and tangent lines. A pin runs inside from the top of the lion's head to the bottom of a hollow receptacle of semicircular outline, decorated with three pairs of ribbed lines. From wire spirals on the collar hang chains, to which are attached four pendants; two represent eggs and two are in the form of flying birds, probably duck, modelled front and back like the owls of no. 2. From the receptacle hang three more birds like the upper pair, but not identical. An object in some perishable material has been lost between the lion's head and the receptacle; the pin would have run through the centre to secure it.

The birds indicate that this goes with no. 2. The fact that the piece is meant to hang and that it is intended to be seen from all sides suggests that it is an ear-ring. Neither the form nor the material of the missing object can now be determined. It must have been circular in section at the top and oblong at the bottom and pierced down the centre to take the pin. The receptacle could have hung either sideways or fore-and-aft in relation to the lion's head. It is hard to visualize a satisfactory composition with the former arrangement. If the latter is correct, it is just possible to see the receptacle as an axe-blade and to reconstruct the piece on the lines of the contemporary ceremonial axe from Mallia, with the forepart of a lion at one end and a blade at the other.⁵⁵ But this is nothing more than speculation. As for the material, it must have been both precious and perishable. The date is early for amber or glass; faience or ivory are both possible.

⁴⁷ See Frankfort, *Art and Architecture of the Ancient Orient* 56, pl. 56.

⁴⁸ Nilsson, *op. cit.* 490.

⁴⁹ To bibliography, add Becatti, no. 119. Pallottino *Critica d'Arte* 1942, pl. 1, fig. 1.

⁵⁰ Evans (*JHS* xiii. 207) and Marshall (*BMC Jewellery* 54) both mention traces of blue glass-paste. By this they presumably mean the substance present in nos. 12-16, which

they also mistook for glass, but which in fact is lapis lazuli.

⁵¹ e.g. Bossert, *The Art of Ancient Crete* figs. 226-31, 238, 248-55.

⁵² Chapouthier, *Deux Épées . . . (Études crétoises v)* pl. 18.

⁵³ *PM* iii. 418, figs. 283 ff.

⁵⁴ To bibliography add Becatti, no. 120.

⁵⁵ *Mon Piot* xxviii. 1 ff.: *Études crétoises* i, pl. 32.

5. *BMC Jewellery* no. 752 (PLATE 9 e). A gold pendant, 6 cm. long, consisting of two figures of owls on chains, as on no. 2, suspended from a barrel-shaped cornelian bead, capped with gold. At the top end of the bead is a small ring for attachment. This almost certainly comes from an elaborate ornament like nos. 1-4. The fact that the birds are double-sided suggests that the complete piece was itself double-sided, like nos. 2 and 4, and was probably an ear-ring.

It may, then, be regarded as established that nos. 1-5 are closely connected and are Minoan, of about 1700-1550 B.C.

6. *BMC Jewellery* nos. 692-745⁵⁶ (PLATE 9 f). Fifty-four identical gold plaques, of diam. 4 cm., consisting of a convex boss decorated with a rosette by means of impressed dots, having a raised border, and surrounded by eight connected spirals. The border and the spirals are decorated with impressed transverse lines. Each plaque is pierced at four points on the circumference.

Somewhat similar plaques were found at Chrysolakkos,⁵⁷ and so are dated 1700-1550 B.C. In addition, the central pattern is closely paralleled on a diadem from Grave IV of Grave Circle A at Mycenae,⁵⁸ and the bosses are matched by gold ornaments from Grave Omicron of Grave Circle B;⁵⁹ both these objects come somewhere in the sixteenth century B.C. The plaques, then, should be dated either in the period of Chrysolakkos or in that of the Shaft Graves, i.e. between 1700 and 1500 B.C.

The holes round the edges suggest that the plaques were sewn on garments, and there is other evidence that women's dresses in the Bronze Age were so decorated.⁶⁰

7. *BMC Jewellery* nos. 683 and 684 (PLATE 13 a). Two gold diadems, 37.5 and 48 cm. long respectively, the ends of which are drawn out and made into loops. Many diadems of this type, different only in being elaborately decorated, come from Grave Circle A at Mycenae, of 1550-1500 B.C.⁶¹ The looped ends, however, strongly recall the disks of nos. 1 and 3, and suggest that a slightly earlier dating is perfectly possible. It would then be safe to date the diadems in the seventeenth or sixteenth century B.C.

They must have been placed round the brow of the dead and tied behind by a cord or wire passing through the loops.

8. *BMC Jewellery* no. 691 (PLATE 13 a). A gold band, 39.7 cm. long, decorated by means of raised dots with two lines of returning spirals between two straight lines. Nine small holes are pierced in one end.

Decoration with raised dots is found at Mochlos,⁶² Platanos,⁶³ and Chrysolakkos⁶⁴ and in no. 1 here, but not apparently in later contexts. A date between 2000 and 1550 is therefore probable. The later part of this period is suggested by the double-spiral pattern, which is not found at Mochlos or Platanos, but is apparently established by the sixteenth century.⁶⁵ The date proposed is therefore 1700-1550 B.C.

The band was probably a diadem, like those of no. 7.

9. *BMC Jewellery* nos. 685-90 (PLATE 11 c). A number of thin gold bands, broken from longer bands, about 1.5 cm. wide. The ends, where preserved, are pierced. Bands like these are found at Mochlos⁶⁶ and Chrysolakkos,⁶⁷ but apparently not in later contexts. A date between 2000 and 1550 B.C. is therefore indicated. They were presumably sewn on women's dresses.

⁵⁶ To bibliography add Becatti no. 121.

⁵⁷ Demargne, pl. 65, nos. 564; 563; unnumbered to right of 563; unnumbered, immediately below last.

⁵⁸ Karo, pl. 39, nos. 236-9.

⁵⁹ *Illustrated London News* Feb. 27th, 1954, 324, fig. 7.

⁶⁰ *Archaeologia* lxxxii (1932) 195.

⁶¹ Karo, pls. 36-39, especially pl. 39 (top).

⁶² Seager, figs. 8 and 9, and elsewhere.

⁶³ Xanthoudides, op. cit. pl. 57.

⁶⁴ Demargne, pl. 65.

⁶⁵ *PM* iii. 295, fig. 193. Karo, pls. 174 (no. 200) and 55.

⁶⁶ Seager, figs. 8, 10.

⁶⁷ Demargne, pl. 65.

10. *BMC Jewellery* no. 767 (PLATE 11 *b*). A heavy gold bracelet, 7 cm. in diameter. An object such as this, without decoration, is virtually undatable. Similar bracelets do not appear to be known in Greek lands, but one not unlike was found at Dahshur in Egypt,⁶⁸ and a date in the general neighbourhood of 1800 B.C. may be tentatively suggested.

11. BM nos. 758A and 759A⁶⁹ (PLATE 12 *a-b*). Two sets of double-sided hollow gold beads in the shape of palm-branches. A close parallel comes from Grave Circle B at Mycenae,⁷⁰ and a date in the sixteenth century B.C. (M.M. III-L.M. IA) is therefore suggested. The identification with palm-branches is made clear from a gem from the same Grave Circle.⁷¹

12. BM no. 756A⁷² (PLATE 11 *d*). Eleven beads in the form of a right hand holding a female breast; three are of cornelian; three of lapis lazuli; and five of gold. All have flat backs. The gold beads are hollow; the front and back are soldered together. No beads of this form are apparently recorded elsewhere, and it is not immediately evident where or when these were made. At first sight a Minoan origin of the seventeenth century might be deduced from the use of lapis lazuli also in the rings nos. **12-16**, and possibly in no. **3**, and from the soldered flat backs of the gold beads, which associate them with no. **3**. It may be so; but there is another possibility. The motive, of which the beads are an epitome, of a naked woman pressing her breasts had a high antiquity in Mesopotamia, Syria, and Anatolia, where it was associated with fertility goddesses under various names. Although it occasionally strayed into the Aegean, it was never really at home there, presumably because the religious ideas which it embodied were not popular.⁷³ Whilst the subject-matter thus makes it far from certain that the beads were made in Greek lands, the choice of material increases the doubt. It is in Mesopotamia in the Bronze Age that cornelian, lapis lazuli, and gold are chiefly found in combination. In the jewellery from the Royal Graves at Ur such a combination is almost universal; in many cases separate objects of the same form are reproduced, as here, in these materials.⁷⁴ And Mesopotamia is one of the earliest homes of this motive.

If a suitable date for the import of such objects into Greek lands be sought (and it may be assumed that the Treasure comes from somewhere in the Greek world, if not from Aegina) one period in the Bronze Age stands out as virtually the only possibility. In the time of Hammurabi of Babylon, in the nineteenth century B.C., and also shortly before and shortly after his time, there is evidence for direct contact between Crete and Babylonia. This takes the form of Babylonian cylinder-seals, of which a number have been found in Crete, and also a cuneiform inscription from Cythera.⁷⁵ However the seals reached Crete, whether brought back from his travels by a Cretan traveller, brought in by a visiting Babylonian, or imported by the trade-route through Syria, the beads could well have come the same way.

The suggestion is, then, either that the beads are Babylonian and were exported to Crete

⁶⁸ De Morgan, *op. cit.* pl. 20, no. 17.

⁶⁹ These comprise all the beads of this type from the old nos. 758 and 759 respectively, together with a few more, from the same source, acquired in 1914. They have been restrung (in 1956) in a less fanciful and more logical way, and one which has a greater chance of being correct. No reliance is to be placed on the order in which the beads were strung when the Treasure was acquired.

⁷⁰ *Illustrated London News* 27 Feb. 1954, 324, figs. 5 and 8.

⁷¹ Mylonas, *Ancient Mycenae* fig. 80.

⁷² To bibliography add Beck, *Beads and Pendants* 35, fig. 28, A. 7. a. These beads were strung together (in 1956) from beads from nos. 753, 756, 760, and two, of cornelian, from the same source, acquired in 1914. This arrangement does

not pretend to be correct, but is logical and makes for greater ease of study. There is no evidence for the original arrangement of the beads from the Treasure. That the blue beads are of lapis lazuli was established by examination (in Nov. 1956) by the British Museum, Natural History, Department of Minerals. At the same time the inlay of the rings nos. **13-16** was also established as lapis lazuli.

⁷³ Examples are: Seager, figs. 32 and 34, and Demargne, pls. 31 and 32 (twentieth century B.C.); Karo, pl. 27, nos. 27 and 28 (sixteenth century B.C.); Winter, *Typen der figürlichen Terrakotten* i. 19, and *BMC Terracottas* i (1954) no. 32 (seventh century B.C.).

⁷⁴ Woolley, *Ur Excavations* ii, pls. 127-35.

⁷⁵ *AJA* xlix. 14 ff., and refs.

about the nineteenth century B.C., or that they were made in Crete in the seventeenth century B.C., under strong Babylonian influence.

13. *BMC Finger-rings* no. 693; *BMC Jewellery* 56, C (PLATE 11 e). A gold ring; the outer surface is inlaid in cloisonné with lapis lazuli,⁷⁶ which serves as a background for an oblique maeander pattern in gold. A not dissimilar ring, inlaid with the same material, comes, rather surprisingly, from a Royal Tomb at Ur,⁷⁷ and is dated about 2500 B.C. In Greek lands the earliest recorded inlaid rings belong to the mid-fifteenth century⁷⁸ and they did not go much later.⁷⁹ Since Mesopotamian influence was hardly felt in the Aegean before the eighteenth century B.C. (see under no. 12), we are left with a bracket of about 1800–1400 B.C. Within this bracket the period 1700–1550 is suggested by the pattern, which is paralleled on a vase from Mochlos of M.M. III (FIG. 4).⁸⁰ The only other occurrence of the pattern, in the seventh century B.C., is quite out of the question for a ring of this nature.⁸¹ Moreover, a date contemporary with no. 3 would be very suitable, if that piece was originally inlaid with lapis lazuli, as seems very probable.



FIG. 4. CUP FROM MOCHLOS WITH MAEANDER PATTERN.
(Drawn from Seager, *Mochlos*, fig. 31)

14. *BMC Finger-rings* no. 691; *BMC Jewellery* 56, B (PLATE 11 e). A gold ring; the outer surface is inlaid in cloisonné with two parallel rows of lapis lazuli; the bezel is a Herakles knot, also of gold inlaid with two rows of lapis lazuli.⁸² In Greek lands this knot was not common before Hellenistic times, when it became extremely popular;⁸³ but this is not a Hellenistic ring. In Egypt, however, it is known from the Twelfth Dynasty onwards; it figures largely in the Treasures of Lahun⁸⁴ and Dahshur.⁸⁵ It could in consequence have reached the Aegean world at any time from 1800 B.C. onwards. For two reasons it should probably be assigned to the period 1700–1550 B.C. First, on technical grounds it must be contemporary with no. 13. Secondly, an Egyptianizing ornament in the shape of a falcon in the British Museum (PLATE 15g),⁸⁶ which comes from Crete, is in many ways like nos. 1–3 here, whilst at the same time it has cloisonné inlay like that on this ring. If the falcon is a genuine connecting-link, the ring will be contemporary with nos. 1–3.

15. *BMC Finger-rings* no. 690; *BMC Jewellery* 56, A (PLATE 11 e). A ring composed of a solid gold hoop, flat inside and rounded outside, with an oval bezel set at right-angles. The bezel has a semicircular indentation at either side, and is inlaid, like nos. 13 and 14, with lapis lazuli set in gold cloisons. At first sight the bezel would be taken to represent the so-called Boeotian shield of the eighth century B.C. and later. This, however, does not seem possible,

⁷⁶ See p. 50 n. 72.

⁷⁷ Woolley, op. cit. pl. 138.

⁷⁸ The Vapheio Tomb, *AE* 1889, pl. 7, 9.

⁷⁹ Slightly later examples come from Phaestus (*MA* xiv. 592, figs. 53–55) and Volo (*AE* 1906, 233, figs. 10, 11).

⁸⁰ Seager, fig. 31, XII m.

⁸¹ Payne, *Necrocorinthia* pl. 4, 1–2; Pfuhl, *Malerei und Zeichnung* fig. 135.

⁸² See p. 50 n. 72.

⁸³ See Coche de la Ferté, *Les Bijoux antiques* 67.

⁸⁴ Winlock, *Treasure of Lahun* pl. 13c.

⁸⁵ De Morgan, op. cit. pl. 16, no. 15.

⁸⁶ *BMC Jewellery* no. 817. I am assured by I. E. S. Edwards that, although there is strong Egyptian influence, the piece is not Egyptian. The fact that the inlay is a pyroxene and not lapis lazuli is immaterial; the principle is the same. It was analysed by the British Museum, Natural History, Dept. of Minerals in Nov. 1956, and was pronounced to be a pyroxene, probably diopside.

since the shape of the bezel and its relationship to the hoop are typical of Minoan and Mycenaean rings, and of virtually no others. Moreover, this ring bears a strong resemblance, both in materials and in technique, to nos. 13 and 14, and cannot be far in date from them. Somewhat similar rings come from tombs at Volo⁸⁷ and Phaistos⁸⁸ of the fifteenth century B.C., but the form of the hoop is more closely paralleled in rings of the M.M. III period: in particular, one in the British Museum, from Crete (PLATE 15 d),⁸⁹ and one from the Mavro Spelio Cemetery at Knossos.⁹⁰ On balance a date in the period 1700–1550 seems probable.

It remains to explain the form of the bezel. If it does represent a shield—and it is difficult to see what else it could be—one would expect at this date to find not this variety but the figure-of-eight form which is so common as a decorative motif in Minoan and Mycenaean art. The Boeotian form, which takes its name from Boeotian coins of the sixth century and later, is in fact first found in the eighth century B.C. in Crete and elsewhere.⁹¹ There is little doubt that it was introduced from the East as one of the many elements of the Orientalizing movement; and it cannot therefore be traced back into the Bronze Age in Greece.

Since this is so, and since it is quite impossible, on technical grounds, to bring the ring down to the eighth century, it follows that shields of this form must have been known also in the seventeenth century B.C. in Greek lands, either *in corpore* or in representations, and that any resemblance between the earlier and the later forms is either a coincidence or is to be explained by a continuous tradition outside Greece. There is at present no evidence in favour of the latter alternative; consequently, in the present state of our knowledge, we are faced with a coincidence.

This form can plausibly be explained as an adaptation of the figure-of-eight shield to the oval shape suitable for a Minoan ring; the change is after all a small one and the result aesthetically more satisfying. A slightly later agate bead, of L.M. IA date, in the British Museum shows the same process rather more clearly (PLATE 15 a).⁹²

16. *BMC Finger-rings* no. 692; *BMC Jewellery* 56, D (PLATE 11 e). A gold ring in the form of a thin plate, with both edges turned outwards. The groove so formed is filled with lapis lazuli, fluted diagonally. No exact parallels are known, but it is clear from the technique and from the materials that it is contemporary with nos. 13–15.

We have then in nos. 13–16 a self-contained group, to be dated in all probability between 1700 and 1550 B.C.

17. *BMC Finger-rings* no. 888; *BMC Jewellery* 56, E (PLATE 11 e). The bezel and part of the hoop of a ring of thin gold foil. The bezel is a convex oval, decorated with cross-hatched lines; the hoop is grooved down the middle. Since the gold is much too flimsy to have existed by itself, it must have been wrapped round a core of some other material now perished, such as wood, ivory, or glass. A Cretan origin, of about 1700–1550 B.C., may be tentatively suggested, since the closest parallels, both to the shape of the bezel and to the double form of the hoop, come from burials of that date at Sphoungaras.⁹³

18. *BMC Jewellery* no. 751, (PLATE 11 f). Five plain gold rings with open ends, about 3 cm. in diameter. Rings of this nature, and similar spirals, are, in the present state of our

⁸⁷ *AE* 1906, 234, figs. 10 and 11.

⁸⁸ *MA* xiv. 592, figs. 53–55.

⁸⁹ *BMC Finger-rings* no. 14.

⁹⁰ *BSA* xxviii, pl. 19.

⁹¹ Kunze, *Kretische Bronzereliefs* pls. 10 ff., and see Evans, *JHS* xiii. 213. For recent discussions see Lorimer, *Homer and the Monuments* 155 ff., and Webster, *BSA* 1 (1955) 41 ff. There are Classical examples of rings with a Boeotian shield,

but they are very different. See Coche de la Ferté, *op. cit.* pl. 17, 2–3; Amandry, *Collection Stathatou* pl. 30, no. 214; Payne, *Perachora* i, pl. 84, 30 and 45; *AM* xxxviii, pl. 16, 7–8.

⁹² Reg. no. 1952. 5–6. 2. The dating is by the Rev. V. E. G. Kenna, R.N. See also *AJA* ix (1905) 280, fig. 1 and pl. 10.

⁹³ Hall, *Sphoungaras* 69, fig. 43 A and B.

knowledge, first known in Greek lands in the fifteenth century B.C., and they continue for some four centuries.⁹⁴ Since, however, very similar ones are found in Middle Helladic tombs, an earlier date is perfectly possible.⁹⁵ Their purpose is not clear; they have been variously identified as ear-rings,⁹⁶ hair-rings, goldsmiths' raw material, and units of currency.⁹⁷ The second identification is the least improbable.

These rings will, then, have been made in Crete or Greece at some time in the Middle or Late Bronze Age. A closer dating does not seem possible.

19. BM no. 753A⁹⁸ (PLATE 13 *b*). A necklace consisting of: (1) twenty-six gold collared beads with circular depressions; (2) six small spherical and biconical gold beads; (3) twenty-five pointed-oval gold pendants on chains.

19 (1). Nothing really like these is known; closest are dimpled amethyst beads from Kakovatos of the fifteenth century B.C.⁹⁹ The beads probably represent wrinkled seeds, perhaps peas. A date in the Middle or Late Bronze Age is probable.

19 (2). Beads of this kind are virtually undatable, since they were probably made at all periods. They are particularly common in the Bronze Age.¹⁰⁰

19. (3). The general resemblance between these pendants and the 'eggs' attached to no. 4 suggests that they are contemporary with that piece, and should consequently be dated 1700–1550 B.C.

20. BM no. 754A¹⁰¹ (PLATE 13 *b*). A necklace consisting of: (1) eighty gold melon-shaped beads, of which seven (three at the left and four at the right) are collared; (2) fifteen green jasper pendants with a gold cap at one end, representing acorns.

20 (1). So-called melon beads (they probably in fact represent seeds of some kind, perhaps nasturtium) appear to have been made in the Middle and Late Minoan periods,¹⁰² and occasionally later.¹⁰³

20 (2). Acorn beads of this nature are not recorded elsewhere. A probable date, however, for these, from the resemblance of the gold capping to that on no. 5, is 1700–1550 B.C.

21. BM no. 760A¹⁰⁴ (PLATE 12 *c*). A necklace consisting of: (1) 166 cornelian beads of spherical or slightly biconical form; (2) one cornelian oval bead; (3) fifteen cornelian barrel beads; (4) three cornelian cylindrical beads with engraved encircling lines; (5) three amethyst triple spacing beads of amygdaloid shape.

21 (1). Quite undatable, since cornelian beads of this kind were made virtually at all periods.

⁹⁴ *BSA* xxxix. 65 ff. (L.H. II); *MA* xiv. 595, fig. 57 (L.M. IIIA); *BSA* xxv. 54 (L.H. III). *AE* 1888, pl. 9, 14 (L.H. II or III). *BMC Jewellery* pl. 3, no. 197 and many more not illustrated (L.H. III). *Swedish Cyprus Expedition* i, pls. 67, 78, 88.

⁹⁵ Blegen, *Zygouries* 202, fig. 189 and *Prosymna* 265. Tsountas, *Dimini and Sesklo* pls. 4:6 and 5:1.

⁹⁶ *BMC Jewellery* 21.

⁹⁷ *BSA* xxxix. 73.

⁹⁸ Restrung in 1956. Comprising elements from the old numbers 747–50, 753, 758–60. The purpose of the re-stringing was to unite, for ease of study, all beads of the same kind. The combination in one necklace of different classes of bead, here and in nos. 20 and 21, implies no suggestion that they were so combined originally; it has been done purely for exhibition purposes. Nor in fact is there any proof that all beads of the same kind belonged to the same necklace; but this is probable.

⁹⁹ *AM* xxxiv, pl. 14, 7.

¹⁰⁰ Examples, taken at random, are: Seager, fig. 10, II. 22 (twentieth century); *ibid.* pl. 10:5, fifth from top of either side (L.M. I or later); *PM* iv. 963, colour plate xxxiv, extreme right of upper necklace (L.M. IA); Lolling, *Kuppelgrab bei Menidi* pl. 3, 1, nos. 4 and 9 from left (L.H. IIIB).

¹⁰¹ Restrung in 1956. Comprising elements from the old nos. 753–5, 758, and 760, and a few beads, from the same source, acquired in 1914.

¹⁰² *Ann.* xiii–xiv. 195, fig. 63 (M.M. I). *PM* iv. 963, col. pl. xxxiv, the two to right of lotus bead (L.M. IA). *MA* xiv. 605, fig. 74 (top) (L.M. IIIA). Lolling, *op. cit.* pl. 3, 1 (L.H. IIIB). *BMC Jewellery* pl. iv, no. 578 (L.H. III).

¹⁰³ *BMC Jewellery* pl. ix, nos. 1003–6 (Ephesus, seventh or sixth century).

¹⁰⁴ Restrung in 1956. Comprising elements from the old nos. 753, 758–60, and a few beads, from the same source, acquired in 1914.

21 (2). Equally undatable.

21 (3). Paralleled in no. **2**, the longer ones in the centres, and the shorter attached to the chains. Whilst such beads could easily come from necklaces, it is in the circumstances more likely that these specimens come from pieces of jewellery (now missing) like those comprising no. **2**, particularly since the existence of one more such piece has already been suspected.¹⁰⁵

21 (4). Paralleled in no. **2**. They must surely come from similar pieces, now missing.

21 (5). A close parallel to this unusual type of bead, also in amethyst, comes from a deposit at Knossos associated with the Temple Tomb.¹⁰⁶ A Minoan origin and a date either in M.M. III or L.M. IA is therefore indicated, i.e. in either the seventeenth or the sixteenth century B.C. Multiple spacers are common in Mesopotamia and in Egypt at this date but are rare in Crete. The shape, however, is neither Mesopotamian nor Egyptian, but has the common Minoan amygdaloid form.

22. *BMC Jewellery* no. 757 (PLATE 13 *b*). A flanged disk-bead of rock-crystal, perforated diametrically. Beads of this shape are rare, but a wide range in time is indicated by the presence of one in an Early Cycladic tomb¹⁰⁷ and of another in a Late Minoan tomb at Mochlos of 1550–1400 B.C.¹⁰⁸ An Aegean origin and a date at some time in the Bronze Age are probable.¹⁰⁹ The purpose of the flange is to take a cord for the attachment of a pendant.

23. *BMC Jewellery* no. 768 (PLATE 14 *a–b*). A gold one-handled cup, of 9.7 cm. diameter, with a concave offset rim, decorated in repoussé with a rosette at the bottom and with spirals running round the bowl. The handle is now missing. In metal, no close parallels are known. The closest are a cup from the South House at Knossos, which has similar spirals but lacks the distinctive rim (PLATE 15 *b*),¹¹⁰ and a goblet from Grave Circle A at Mycenae, which has the rim but lacks the spirals;¹¹¹ both vases are dated 1550–1500 B.C. In pottery, certain Cycladic vases of the same date have a similar profile.¹¹² The available evidence thus points to a date in the later sixteenth century B.C. From our knowledge of metal vases in subsequent periods, the cup is unlikely to be later. It could, however, easily be somewhat earlier, since our knowledge of metal vases of the M.M. III period is scanty in the extreme.

CONCLUSIONS

The Treasure appears from the foregoing examination to be predominantly Minoan. On analysis, the articles of jewellery which comprise it fall into four categories, according to the dates suggested for them:

- (a) Middle Minoan III, 1700–1550 B.C.: nos. **1–5**; **8**; **13–17**; **19** (3); **20** (2); **21** (3, 4).
- (b) Middle Minoan III or somewhat later, 1700–1500 B.C.: nos. **6**; **7**; **11**; **21** (5); **23**.
- (c) Middle Minoan III or somewhat earlier, 2000–1550 B.C.: nos. **9**; **10**; **12**.
- (d) Not closely datable, but, generally speaking, almost certainly of the Aegean Bronze Age. nos. **18**; **19** (1, 2); **20** (1); **21** (1, 2); **22**.

From this analysis it appears that much of the Treasure belongs to the period 1700–1550 and to no other, and all could well belong to this period. It would in consequence be reasonable

¹⁰⁵ See also p. 47 n. 41.

¹⁰⁶ *PM* iv, colour plate xxxiv, bottom necklace, to right of large pale blue bead.

¹⁰⁷ *AE* 1898, pl. 8, 24.

¹⁰⁸ Seager, fig. 41, xxii *a*, and pl. 10; the bead from which the bull's head hangs.

¹⁰⁹ A bead from Ephesus (Hogarth, *Ephesus* pl. 46, no. 35) is made on the same principle, but is much wider. It is not so close in shape as those cited above.

¹¹⁰ *PM* ii. 387, fig. 221 *a*.

¹¹¹ Karo, pl. 126.

¹¹² *Phylakopi* 134, fig. 106, and pl. 27, 3.

to conclude that, contrary to the opinion of Stais, it does represent a homogeneous deposit, and that it is all Minoan, of 1700–1550 B.C. The alternative suggestion for no. 12, that it is not Minoan and is slightly earlier in date, is not of material significance.

From the nature of the objects it may be inferred that they were grave-goods, the contents either of one very rich tomb, or of a group of closely related tombs. The original burial-place, however, cannot be the tomb in Aegina associated with the Treasure, since the Treasure is approximately four centuries earlier than the tomb.¹¹³ Nor indeed is it to be expected that Minoan jewellery of this date should be found anywhere outside Crete,¹¹⁴ so that Welter's suspicions appear only too well founded. A Minoan cemetery sufficiently rich to yield jewellery of this nature could belong only to one of the principal Cretan cities; it is not possible at this stage to specify which, but the choice must surely be restricted to the three palatial cities of Knossos, Phaistos, and Mallia.

Nevertheless, there must be some substance in the story, so well attested, that the Treasure was in fact discovered in a certain Mycenaean chamber-tomb in Aegina. Could it have been reinterred there after being first excavated in Crete? There are two possible explanations as to how this could have happened. First, there is Welter's theory of a tomb-robber's cache.¹¹⁵ He does not say when he thinks the Treasure might have been stolen and concealed in this tomb; it is in fact unlikely to have happened at any time, for it is scarcely conceivable that a tomb-robber, ancient or modern, would hide his loot where it was most likely to be discovered by other treasure-seekers. A second and more probable explanation is that the Treasure was excavated in Crete not long before its appearance in 1891, was secretly taken to Aegina, and was 'planted' in the tomb on Windmill Hill to be discovered there. The removal from Crete would be easy enough in a sponge-boat on its way home from Cretan waters, and we have already had occasion to associate the Treasure with sponge-dealers.¹¹⁶

With no knowledge of the circumstances it is impossible to say for certain why it should be necessary to fake a burial of this kind, but we may speculate. Perhaps the Turkish authorities in Crete (for Crete was then in Turkish hands) had got wind of the truth. Those concerned, if they wished ever to return to Crete, must at all costs divert suspicion from the real source of the Treasure. The best way to do this would be to arrange a discovery elsewhere, where the Turkish writ did not run, and for this purpose a chamber-tomb in Aegina was selected. As for the Greek authorities, they would soon learn of the 'discovery' in Aegina, but they were less to be feared than the Turks, and would be unlikely to act on suspicion alone.

If this suggestion is correct, and the Treasure was stolen from Crete about the eighteen-eighties, it is tempting to conclude that it comes from the communal tomb of Chrysolakkos at Mallia. Not only does this site provide the only close parallels for the most characteristic pieces, but it is known to have been very rich in gold (hence its name, which means Pit of Gold) and to have been extensively robbed by the local inhabitants, especially in the years 1880–5.¹¹⁷ Most of the gold is said to have been melted down, but there is no proof. In fact, it

¹¹³ It has been suggested that the Treasure is loot from a Cretan cemetery, stolen in the thirteenth century B.C. by an Aeginetan raider and buried in his tomb. Against this view are, first, the character of the burial as described by Welter and, second, the absence of any traces of the Treasure in Keramopoullos's tomb, which has every indication of being the tomb where it came to light.

¹¹⁴ The earliest Minoan jewellery to be found outside Crete comes from Grave Circle B at Mycenae. This belongs to the very end of M.M. III and is appreciably later than the bulk of the Treasure.

¹¹⁵ Several hoards have been explained, rightly or wrongly, as ancient tomb-robbers' caches. See *PM* iv. 963; *B&A* xxxix. 65; *AM* lv. 119.

¹¹⁶ E. J. J. Cresswell in *Sponges* (1921) 25 writes: 'The sponge-fisheries of Crete, which are very important, are carried on entirely by fishermen from other Greek islands, who arrive in the spring and return in the autumn to their native places with their catches.' If this was true in 1921, it was probably true thirty years earlier.

¹¹⁷ Demargne 25 ff.

would have been senseless to do so, since the gold of Minoan jewellery is extremely thin, and the yield would have been paltry compared with the value of such objects on the antique market. The Treasure reached the British Museum in 1891, after what would have been a discreet lapse of time.

It is, of course, most unlikely that the Aegina Treasure should comprise all the gold taken from Chrysolakkos. Can we identify other pieces which might have a similar origin? In the British Museum are three candidates: the goat jewel with pendant disks, which has already been compared with no. 1 (*BMC* no. 815; PLATE 15 *h*); an Egyptianizing figure of a falcon, which has been considered in relation to no. 13 (*BMC* no. 817; PLATE 15 *g*); and a puzzling fragment with lions' heads (*BMC* no. 816; PLATE 15 *i*). All three pieces bear a strong technical resemblance to nos. 1-3 of the Treasure, and the falcon has in addition been compared with nos. 13-16. They all came to the Museum from the same source in 1876, and were said to have been found in Crete. A search in other museums and in private collections might well bring to light further material of this nature.

Finally, how does this reassessment fit into the framework of Minoan art? As far as jewellery is concerned, there was previously a gap of about three centuries between the gold ornaments of Mochlos and Platanos on the one hand¹¹⁸ and those from the Shaft Graves at Mycenae on the other, bridged by little but the few objects excavated by the French at Chrysolakkos. The latter part of this gap has now been filled, and it is clear that technically and artistically the M.M. III period was every whit as accomplished as the succeeding period of the Shaft Graves.¹¹⁹

On the other hand, the difference between the jewellery of the period of the Treasure and that of the Mochlos tombs is profound. In the twentieth century B.C. the goldsmith's work was confined to chains and to strips of metal cut into patterns and decorated with impressed dots or with an elementary form of repoussé. In the seventeenth we find the regular use of solder for combining different elements in one design; filigree;¹²⁰ granulation;¹²¹ repoussé of an advanced kind, frequently involving the use of moulds; cloisonné inlay; and the carving of hard stones.

The technical accomplishment and the sureness of touch in the seventeenth century bear witness to an established tradition. It is therefore to the preceding period that one must turn for the innovations which transformed the art of the Minoan goldsmith. Unfortunately the eighteenth century, and most of the nineteenth, is still a blank so far as jewellery is concerned; but it is exactly the period in which we should expect such innovations, since it sees for the first time regular and direct contact between Crete and the older and richer civilizations of Egypt and Babylonia.¹²² It is not as yet possible to attribute any of these innovations to one particular culture, since all the processes involved were at that date familiar both in Egypt and in Babylonia, and the style, by the seventeenth century, had been too completely Minoized to give a clue as to its origins. It is, however, probable, from a study of the ultimate origins of the Aegina Treasure jewellery, that both sources were drawn on.

It would then seem that the goldsmiths of Crete were more than ready to avail themselves of the new skills at their disposal in the nineteenth century B.C., if the seventeenth was to see work as proficient technically and as sure aesthetically as the so-called Aegina Treasure.

¹¹⁸ The latest pieces from Platanos probably just come into the nineteenth century, slightly later than Mochlos.

¹¹⁹ Whether the Shaft Grave jewellery was made in Crete or on the Mainland is immaterial. There can be no doubt that it was made by Minoan artists.

¹²⁰ Filigree, unknown at Mochlos, is just found at Platanos

(Xanthoudides, op. cit. pl. 57, nos. 454 and 455). Its introduction can therefore be dated with some certainty to the very beginning of the nineteenth century B.C.

¹²¹ Not actually present in the Treasure. See Appendix.

¹²² Kantor, *Aegean and Orient* 18.

APPENDIX

To avoid obscuring the argument, little has hitherto been said about the technical processes employed in the Treasure. Most of these processes, such as repoussé, the raising of bowls, cloisonné inlay, and filigree, are clearly described in the textbooks¹²³ and need no further comment. It may, however, be helpful to elaborate on one process, and to explain the absence of another.

The process about which more might be said is repoussé. The duplication of ornaments in nos. 2, 4, 6, and 11 indicates that some mechanical means of reproduction was employed. Examination of the objects themselves suggests that they were in the main essentials formed in moulds, either by hammering or by pressing, and that subsidiary detail was subsequently added by punching from the front. No moulds of the period have survived, but from the existence of slightly later moulds of steatite, designed for this purpose, we may infer that here, too, steatite moulds were used.¹²⁴ The gold must have been pressed rather than hammered, since steatite could not stand up to hammering. Pressing, although not employed today, would be perfectly feasible at the date in question, since the gold used was much softer than modern sheet gold, being both purer and thinner.

There is no granulation. The process was known in Crete from the nineteenth century or so,¹²⁵ and it occurs on the bee-jewel from Chrysolakkos of the seventeenth century, which has been compared with nos. 1-3 here; but it was never common in Bronze Age Greece. It is almost totally absent from the jewellery of the Shaft Graves at Mycenae, and occurs only rarely in the richest Mycenaean deposits thereafter.¹²⁶ Consequently, the absence of this form of decoration from the Aegina Treasure is not really surprising.

R. A. HIGGINS

ADDENDUM

While this article was in the press, it became apparent that a gold ornament in the shape of a bee in the British Museum (*BMC Jewellery* pl. xiv, no. 1239) bears the same relationship to the Aegina Treasure as do the goat, the falcon, and the piece with the lions' heads. It was acquired from the same dealer at the same time as these pieces; was likewise said to come from Crete; and bears a strong technical resemblance to them and to much of the Treasure. Moreover, the subject and also the character of the granulation and of the filigree associate it closely with the bee-jewel from Chrysolakkos. There are no good grounds for the eighth-seventh century B.C. date given in the Catalogue.

¹²³ See especially Singer and others, *History of Technology* i. 623 ff., and ii. 449 ff.

¹²⁴ Tsountas (*AE* 1897, 97) demonstrates that L.H. III moulds from Mycenae were used both for casting glass and for fashioning sheet gold. Although he describes the moulds as being composed of granite or basalt, subsequent examination has established that they are of steatite. A slightly earlier (L.M. I or II) steatite mould from Knossos lacks the distinctive features for glass-casting, and must have been intended only for pressing gold (*PM* i. 487, fig. 349). From

this period it is a short step backward to M.M. III and the Aegina Treasure.

¹²⁵ Xanthoudides, op. cit. pl. 4, no. 356. Probably contemporary with the jewellery from Platanos (see p. 56, n. 118); a particularly suitable date, if Demargne is right in deriving the process from Babylonia or Syria (*BCH* liv. 418; *RA* (Ser. VI) viii. 87).

¹²⁶ It was certainly commoner in L.H. II than in earlier periods (see *BSA* xxxix. 75), but its use was always exceptional.

THE CARIAN COAST III

(PLATES 16-26)

THIS article concludes the account of our joint researches in Caria. In 'The Cnidia' (*BSA* xlvii (1952) 171-212) we treated of the Cnidian Peninsula, and in 'The Halicarnassus Peninsula' (*BSA* l (1955) 85-171) of the other salient peninsula of the west Carian coast. Caunus with its environs has been treated by Bean in 'Notes and Inscriptions from Caunus' (*JHS* lxxiii (1953) 10-35, lxxiv (1954) 85-110), and the mainland territory of Rhodes in southern Caria in Fraser and Bean, *The Rhodian Peraea and Islands* (1954). In the present article we attempt to cover the parts of the west Carian coast not previously treated in our two joint articles, together with the islands adjacent to that coast. In the south we have retrodden some of the ground covered in *Rhodian Peraea*, especially around and inland from the inner part of the Ceramic Gulf; and in the north we have carried our joint researches into Ionia as far as Teichiussa on the mainland and Leros and Lepsia in the Icarian Sea. We also include some observations on the Cnidian and Halicarnassian peninsulas, supplementing our previous work. In conclusion we discuss briefly the distribution of west Carian dynasties in classical times; and extending our previous observations on Mausolus' remodelling of the habitational network of west Caria, we have tried to give a fuller account of the scope of Hecatomnid enterprise in this direction.

In large part this article is based on the journey that we made together in June 1954. But on the mainland occasional observations go back to earlier journeys; the fresh study of Theangela depends on Bean's and Miss Akarca's researches there in 1955, and some of the other sites have been examined by Bean in more recent journeys. The study of the islands in the present article is based on journeys made by Cook and his wife in 1953 and 1954.

The sketch-maps FIGS. 1 and 13 are in general based on the Turkish 1:200,000 survey; this alone renders the physical features of south-western Caria with any approach to accuracy.

THE RHODIAN PERAEA (FIG. 1)

MARMARIS

We noted the following antiquities in the school at Marmaris.

Inv. no. 1. From Kindira on the western outskirts of Marmaris town. White marble relief slab, broken on the left. Ht. 0.49 m.; thickness 0.09 m.; relief ht. 0.025 m. PLATE 16b.

Inv. no. 12. From Ortaca (Thyssanos). Upper body of draped female figure in white marble. Ht. of fragment 0.26 m. The right arm and left elbow were added, the joining surfaces being broached and perforated for a dowel. There seems to have been a himation over the left shoulder. FIG. 2.

Inv. no. 14. Unknown provenience. Head of young Roman lady in white marble, terminating in a tongue for insertion in a body. Ht. 0.37 m. The hair rises in a crest over the brow, on which small hanging locks form a fringe. On

either side a broad swathe of wavy hair is drawn from brow to ear and continues back in a plait to the bun, round which it is wound. A little curl hangs on the right temple. Another broad swathe of hair runs straight back from the crest to the bun, and another plait runs down the middle of it. The rest of the hair on the skull is drawn in fine strands downward to the sides. Manner of Octavia.¹ PLATE 16a.

Inv. no. 16. The inscription p. 77, no 7, from Gelibolu.

White marble lion on plinth. From Eyliktaş at Marmaris. L. 1.60 m.; br. 0.48 m. The head lost. Probably of Roman date. FIG. 2.

Byzantine mullion, with earlier inscription p. 75, no. 1. From the beach at Marmaris.

considers it middle Augustan, roughly contemporary with the head of Livia, Ny Carlsberg 615 (ibid. fig. 12). Prof. B. Ashmole kindly drew our attention to this study.

¹ Cf. the sequence of coiffures now set up by L. Furnée van Zwet, *Bulletin van de Vereeniging* xxxi (1956) 1 ff.; the author has kindly examined photographs of the Marmaris head and

GÖLENYE

At a spot called Bakıcak, between Gölenye village and the sea, was found the stele published in *Peraea* no. 15. From the concluding words τοῦ Σαμναίου it appears that this stele was originally erected in the precinct of Apollo Samnaeus, who is known at Amos some 4 kilometres to the south. It seemed therefore not unlikely that the precinct in question might be located at or near Bakıcak, and in September 1953 Bean and Miss A. Akarca spent a week examining the



FIG. 2. SCULPTURES AT MARMARIS

plain of Gölenye. Ancient remains are to be seen at various points on the plain, in particular a number of solid architectural blocks curiously cut,² which must have belonged to a large building. These are scattered to the four corners of the plain, and exactly similar blocks are found at a small site called Dereyüzü distant rather over an hour in the hills to the south. Neither at Gölenye nor at Dereyüzü could the site of a temple be determined, nor was anything found which appeared to be earlier than the Roman Imperial period. The sherds in particular were all late. The conclusion seems to be that the temple or precinct of Apollo Samnaeus was not at Gölenye, and that the stele at Bakıcak must have been transported from Amos for the construction of a small church of which the knoll at Bakıcak carries the remains. Other ancient stones in the village of Gölenye were definitely stated to have come from there. It is probable that the precinct of Apollo was at Amos itself, where one of his priests is recorded (*Peraea* no. 12).

SÖĞÜT

On the ancient map the area between Physcus and Cedrae and to the west has hitherto remained a blank. It proves, however, to contain at least two sites which are evidently those of Rhodian demes, and more may possibly remain to be discovered.

From Marmaris westward the road passes over wild mountainous country till it descends to the river at Erküs, where ancient ruins have been remarked;³ from this point northward similar country continues as far as Söğüt, and it seems reasonably sure that there are no ancient sites (as there are no modern villages) in this area. The site at Manastır is of no consequence, comprising merely the badly ruined remains of one or two buildings of uncertain character (presum-

² See the detailed report in *Türk Arkeologiya Dergisi* 1957.

³ Cf. Adm. Chart 1604; *Med. Pilot* iv (5th ed., 1918) 329; Philippon, *Reisen* v. 77; Maiuri, *Ann.* iv-v. 405, fig. 11.

ably ecclesiastical, if the name has any significance) and of very poor medieval masonry. There is no sign of ancient occupation here, and no water anywhere near. Somewhere in this neighbourhood apparently was found the inscription published by Hula and Szanto,⁴ comprising an *ex-voto* to Hecate.

East of this the coast up to the head of the Gulf of Gökova is sparsely populated, though not quite so desolate as it seems to have been in the nineteenth century when it was investigated in the making of the Admiralty charts. The *Mediterranean Pilot* (vol. iv, quoted from the fifth edition, of 1918, p. 335) writes: 'in all the small ports or inlets on the south-eastern side of the gulf, where alluvial deposits have extended the mouths of the small streams which run into the sea,—the care necessary to keep them clear being wanting,—they have become in most instances a pestiferous swamp, the exhalations from which are most prejudicial to human life, and perhaps form an additional reason why the secure and beautiful harbours in that part of the gulf are untenanted'.

Söğüt itself is clearly a Rhodian deme-site. Here a valley, about half a mile broad, runs inland for some 2 miles from the coast; down it runs a stream that flows winter and summer. In the valley, perhaps a mile from the sea, is a stretch of ancient terrace-wall 60 metres long, standing about 1 metre in height. At the mouth of the stream is a delightful little sandy bay, on the west shore of which is a short stretch of ancient quay-wall in excellent isodomic ashlar with cushioned faces. The bay is sheltered on the north by a projecting headland which carries a substantial fortification in very decent preservation but badly overgrown.⁵ The south side of the headland is formed by a high vertical rock-face; the other sides are defended by a fine wall 1.60 m. thick, making a right-angled turn at the north-east corner, where it stands to a height of 4 m. The masonry is a mixture of regular ashlar and quarry-faced polygonal, strongly bossed (PLATE 17*a*). In the north wall is a well-preserved gate 1.60 m. wide and about 3 m. high; it has a false arch of the falsest kind, consisting merely of a triangular piece projecting from the blocks of the gateway on right and left. On either side of the gate, at a distance of 5 m. from it on the west and 10 m. on the east, the wall projects at right-angles for 3 m. On the summit are the foundations of a building with walls 0.50 m. thick. Guarding the approach from the west is a tower or small fort, which has suffered a good deal by the removal of its blocks in recent times. The only significant object that we found is a fragment of an Attic black-glazed 'salt-cellar' of the last quarter of the fifth century B.C. or the early fourth.⁶ The *Mediterranean Pilot* also speaks of a Roman paved road running through the woody morass at the head of the inlet.⁷

For the name of this deme the only evidence is afforded by the inscription no. 2 (p. 75), which lies on the shore of a little cove called İçme about a mile away towards Karaca (see below). This is the epitaph of an Amnistian. As evidence for an identification this is of course not decisive, as the man in question need not have been a citizen of the deme in which he was buried; nor indeed is it certain that the spot where the epitaph lies belongs to the deme at Söğüt rather than that of Altınsivrisi (below, pp. 62*f.*).⁸ Nevertheless, since the man in no. 2 is obviously more likely to be a local man than a foreigner, and since there is no reason why Amnistus should not have been at Söğüt, we place it there provisionally.⁹

⁴ *Bericht über eine Reise in Karien*, SB Wien no. 132 (1894) 31 f.

⁵ Cf. Paton, *CR* ii. 329, *JHS* xi. 110.

⁶ We are indebted to Mr. P. E. Corbett for giving the above date to the sherd and referring to *Hesperia* xviii. 329, 68 for comparison.

⁷ *Op. cit.* 339.

⁸ This evidence is similar to that, for example, which led

to the location of Hygassus at Bayır, an identification which has since proved to be false: see *Peraea* 67, n. 1.

⁹ The site of Amnistus has hitherto remained quite unknown, though the demotic is fairly common in Rhodian inscriptions. Hiller (*JG* xii. 1, p. 10) placed it in the *Peraea*, but without bringing arguments in support. Our no. 2 is, if we are not mistaken, the only epitaph of an Amnistian yet discovered in the *Peraea*.

KARACA

The cove of İçme, where we noted the epitaph of an Amnistian, is at the south end of Karaca bay; we also noted sherds and Hellenistic tiles and two bases of funerary altars there. A ten-minute walk over a spur brings one to a cultivated plain (Hacı Halil Gemiyeri), which stretches for the best part of a kilometre along the shore of Karaca bay and a rather less distance inland, and is surrounded by pinewoods; an island lies off the bay. From Karaca it is an hour and a half's walk up the coast to Taşbükü opposite Cedrae Island (below, pp. 64 *f.*). At the back of the plain at Karaca, built against the foot of the hill-slope, a little fort measuring *c.* 16 by 20 metres stands to a height of 5 metres; it has a tower measuring 12 by 10 metres in heavy, roughly coursed polygonal tending to trapezoidal. The blocks are 70 cm. high, and the corners of the tower show vertical drafting. On the north side of the plain by the seashore we noted the remains of a built tomb with a damaged bucranium altar; in the plain we also examined the square altar (PLATE 16*c*), which has bucranium decoration on all four sides and a relief in a panel on the front,¹⁰ and remarked a smaller one lying buried.

From the back of this plain a path between cliffs leads up the valley in an hour to the little plain of Ovacık, which is set in dense pine-forests under Altınsivrisi. Ovacık has nine huts, and Karaca five or six; they form a *muhtarlık* with Söğüt, which has about twenty houses; from Ovacık to Gelibolu is two and a half hours' walk.

ALTINSIVRİSİ

Altınsivrisi ('Gold Pike') rises from the pine-forests to a sharp conical peak, which commands a wide prospect of land and sea and is now occupied by a fire-ranger's post.¹¹ The summit is practically inaccessible to pedestrians save on the west, where a steep path leads up from the direction of Ovacık. Ascending it—an hour's climb from Ovacık—we concluded that the altitude at the top must be considerably more than the 1500 feet of the British Admiralty survey; and in fact the Turkish map shows a 500-metre contour on its flanks. The chart marks the ruins of a fort on top.¹² Paton alone visited it, and, being badly served by his guide, seems with great difficulty only to have seen the citadel on the summit.¹³ This citadel, crowning the narrow crest, is a hundred metres long, and has a little fort at either end. The north-eastern one, on the highest point, is about 24 metres long and seems to have enclosed a tower; it is built in ashlar masonry (but with polygonal work showing at one or two points) and has a wall thickness of 1.35 m. There is a narrow shaft, roofed with long blocks and presumably a cistern, inside this fort; and just outside, on the north, lies the fallen block which bears the name and design shown on FIG. 4 (below, pp. 75 *f.*, no. 3). The other fort or tower, at the south-west end of the crest, was of similar construction and contains a big cistern. These two strong-points were joined by a double wall with jogs and bastions. There are traces of Byzantine walls and several cisterns of that era.

The north-west face of the hill under the citadel still bears substantial remains of a very considerable town. The houses were terraced on the steep slope and sturdily built (largely in big squared blocks), and they extend most of the way to the foot of the hill; we noted here a rock-cut stairway and an oil-press, but did not have time to make a proper investigation. The corner of a house is shown in PLATE 17 *b*. Among coarser wares we saw a few black-glazed sherds,

¹⁰ Ht. 0.64, w. 0.62, thickness 0.36 m. (the top surface almost entirely broken away); relief depth 0.025 m.; the woman, apparently full-face, sits on a high-backed throne, her feet on a footstool; a small boy stands at her side; the man extends his right hand to the woman, who seems to be

grasping it.

¹¹ The cone appears in the centre of the background in the view from Idyma, Robert, *Ét. anat.* pl. 32. 2.

¹² Cf. *Med. Pilot* iv (1918) 343; Newton, *Halicarnassus* ii. 625.

¹³ *JHS* xi. 110.

some probably going back into the fourth century B.C.; we saw nothing of an earlier period, and are inclined to date this settlement to the fourth century. In the little plain of Ovacık we saw blocks rifled from a built tomb, and a marble altar-base with the epitaph of a Euthenite (p. 76, no. 4).

We feel some confidence in identifying this site with the Rhodian deme of Euthena. We have in the first place the epitaph (no. 4) of a Euthenite at Ovacık. As in the case of Amnistus at Söğüt (above, p. 61), this evidence is not in itself cogent, though it establishes a *prima facie* probability; but rather more is known of Euthena than of Amnistus.¹⁴

In Mela i. 84 the Vatican MS. (A) has: 'cnidus in cornu paene insulae, interque eam et tetraticum sinum in recessu posita euciana.' Variant spellings of the name of the gulf in manuscripts are (according to Tzschucke's note in his edition, Leipzig 1806-7) *Tetruticum*, *Terrarticum*, *Tetrarticum*, *Theraticum*, *Tretaticum*. The emendation 'Ceramicum', which is generally read and quoted without comment, goes back to Hermolaus Barbarus in the 1493 edition; Perizonius (xvii c.) approved of this, as Mela was unlikely to leave the Ceramic Gulf unmentioned, but suggested 'Triopicum', which Tzschucke quotes with approval. Parthey, Berlin 1867, keeps the reading of A except for *Eutiana*, which he found in fourteen manuscripts. 'Euthana' is an emendation by Bursian; it is accepted by Frick in his Teubner text, and we do not doubt that the place mentioned by Mela is in fact that which we call Euthena.¹⁵ Since it was a Rhodian deme, Euthena cannot have lain on Cnidian territory; and if Mela was right in placing it on the coast above Cnidus—he is going north—¹⁶ it must have lain east of the Bencik isthmus. This being so, the reading 'Ceramicum' presents serious difficulty. The name Ceramic seems in antiquity to have been applied to the whole gulf which is now called the Gulf of Cos, with Cnidus at its southern entry point. How then could it be said that Euthena lies between Cnidus and the Ceramic Gulf? Indeed, if the gulf lies eastward of Euthena and Euthena lies east of Cnidian territory, the gulf in question can only be the inner recess of the Gulf of Cos which is now called Gökova (Giova) Bay; and Ceramus itself of course lies well outside this inner gulf. If there were good authority for the reading 'Ceramicum' in Mela, we should not hesitate to accept it and to suppose that the geographer was, as elsewhere, in error. But since it is in fact a conjecture, we are more inclined to suppose that it is the emendation that is false. The inner gulf has its own name at the present day. In medieval times it seems to have been known as the gulf of H. Kosmas, in distinction from the main gulf (Pekaso).¹⁷ If in antiquity this little frequented inner gulf were distinguished from the main gulf, it would most naturally take its name from one of the two principal towns on its shore—Idyma and Cedrae. We find 'Cedreaticum' nearer to the readings of the manuscripts of Mela than 'Ceramicum' and are inclined to propose it as the only acceptable correction. But editors should print *Tetraticum*; whatever it should be, there is no reason to suppose that Mela had the name right.

If the reference in Mela is in fact to this inner gulf, the search for the Euthenite territory is narrowed to the strip of coast between Taşbükü and Bencik; and up to now Altınsivrisi and Söğüt are the only known sites here. A further clue is Mela's *in recessu posita*. If this refers to a recess in the coastline, the allusion may be to Karaca bay, since the territory of the deme at Altınsivrisi must have extended to the shore at Karaca. But the bay of Karaca is perhaps more open than the term *recessus* would suggest, and we think it more likely that the word denotes a

¹⁴ See *Peraea* 69.

¹⁵ We are very much indebted to Mr. W. K. Smith for providing us with the foregoing information about the text of Mela.

¹⁶ Pliny, *NH* v. 107, seems to duplicate the place, Etene (Eutene *E*², *R*²), Eutane (Euctane *R*); his location of Eutane

is evidently up the Ceramic Gulf and thus lends some confirmation to Mela.

¹⁷ Possibly it is also to be identified with the κόλπος Οϊδημος ὄνομα of Const. Porph., *De them.* xiv, but this is far from certain.

position a little inland from the coast, that is, in a recess in the land.¹⁸ The alternative, of course, would be to place Euthena at Söğüt, in which case Altınsivrisi would perhaps be Amnistus. But Εὐθηνίρας is among the commoner Peraean demotics in Rhodian inscriptions, and the deme was evidently of some size: the substantial town at Altınsivrisi, in a dominating position and with a fairly extensive territory, seems to fit the requirements better.¹⁹

CEDREAE

Just off the entrance to Port Gallipoli (Gelibolu bay) a group of three small uninhabited islands lies close to the coast. The situation is admirably shown in an inset on Admiralty Chart 1533. Tombs and ruined churches on the two smaller islets are described in the *Mediterranean Pilot*²⁰ and in some detail by Guidi.²¹ The larger island (Şehir Oğlu) lies to the south of the other two; it has a maximum length of c. 800 metres and is separated from the mainland by a strait 250 metres across.²² The island narrows to an isthmus in the middle. The low-lying west half seems curiously barren of any sign of ancient occupation, though the Admiralty chart marks the traces of a 'Cyclopean' circuit encompassing it. The east end of the island was defended by a powerful circuit in regular masonry with numerous towers. The fortress thus enclosed has a maximum length of 350 metres, with a width hardly more than half as great. In the middle of the fortress are remains of a Doric temple of Apollo and of a Christian church that succeeded it. The area of the agora has been identified on the west, and a substantial theatre survives in a good state of preservation.²³ On the north of the isthmus there is a sheltered bay; but the water is very shallow at its head, and the best mooring may have been under the north side of the fortress. Public inscriptions of Cedreae, dating from Hellenistic and Roman times, have been found in the fortress. We saw Hellenistic pottery, sigillata, and much post-classical ware at the fortress; but we only found two or three scraps of black glaze—one probably going back to the fourth century B.C.—and nothing of an earlier date. At the same time, with the undergrowth and the overlay of post-classical deposits, the conditions were not good for the finding of early sherds.

That this was the citadel or administrative centre of the Rhodian deme of Cedreae is certain; and the buildings and inscriptions indicate that it was a station of some importance. But the main problems of the site remain unresolved. We were unable to find evidence of a populated town on the island, or to discover any trace of the classical city of Cedreae which paid a third of a talent in the Athenian league and was destroyed by Lysander in 405 B.C.

On the mainland, around a little creek opposite Cedreae Island, there is a considerable necropolis of Hellenistic-Roman times, with massive built tombs resembling those of Cnidus (Tekir) and Iasus, and with great stone sarcophagi of the sort common at Ceramus; we saw here the inscription no. 6 (below, pp. 76 f.).²⁴ To the south of this lies a bay with a petrified beach, and olive-yards; six cottages here comprise the recently founded hamlet of Taşbükü; behind

¹⁸ We note that Pliny *NH* v. 100 uses the same term of Phellus in Lycia: *Antiphellos, quae quondam Habesos, atque in recessu Phellos*. The site of Phellus has been disputed; we believe that Pliny refers to its position on Felendağı some 2 miles inland. The alternative site close to the shore at Bayındır Limanı is, it is true, in a small bay, but no more so than Antiphellus, which is not so described by Pliny.

¹⁹ It is, of course, possible that there was some ancient occupation between Söğüt and Bencik. But the coast there is now quite devoid of habitation (above, p. 60), and no remains were noted in the survey for the Admiralty charts.

So it seems to us unlikely that Euthena can have lain there.

²⁰ iv (1918) 339 f.

²¹ *Ann.* iv–v. 379 f.

²² The antiquities have been briefly described by Diehl and Cousin (*BCH* x. 423 f.) and by Guidi (op. cit. 380–4). Our investigations have added nothing of note. The island is also known today as Sedir Ada, i.e. 'Cedar Island'. This may be a modern rendering of the ancient name rather than a genuine survival; it does not appear to have been known to the early travellers.

²³ The theatre is well described by Guidi, loc. cit.

²⁴ Tombs here are described by Guidi, op. cit. 384 f.

this lies hillside, with pine-forests in the interior. Karaca lies an hour and a half along the coast to the south; to eastward a good track above the sea leads to Gelibolu in an hour.

GELİBOLU

The present village of Gelibolu lies scattered over an alluvial plain some 2 miles in length at the mouth of the Gelibolu Çayı. The river, which flows strongly winter and summer, has advanced the shore-line very considerably since antiquity,²⁵ and the plain was certainly of less extent in ancient times. Gelibolu was visited by the Italian explorers in 1921, and again by L. Robert in 1934; Guidi (op. cit., 377 f.) describes ruins in three places (nos. 1, 2, and 3 in our list below); Robert seems to have seen only no. 2, and of that he gives no description, mentioning only some remains of late buildings indistinctly seen among the undergrowth near the foot of the hill. Three sites (our nos. 2, 3, and 4) are marked on Admiralty Charts 1533 and 1604. The five sites known to us, and indicated (without names) on the map FIG. 1, are:

On the right bank of the river: (1) a large medieval castle to which Guidi gives the name Gheli-Bol; (2) an ancient fortress, now called Kızıl (Guidi's 'Qözil'), on the hill directly above the customs-house at the river-mouth. On the left bank: (3) a small fort, called by Guidi Göz-Bel, overlooking the river-mouth directly opposite to Kızıl; (4) a smaller medieval site on the hill behind the present *muhtar*'s house; (5) a small fort or large tower called Koca Kale on a much higher hill to the north-west of the last.

(1) For the medieval castle of Gheli-Bol see Guidi's description, loc. cit., quoted by Robert, *Ét. anat.* 496, n. 1.

(2) For the fortress of Kızıl we are dependent on Guidi's description, loc. cit., quoted by Robert, loc. cit. The site seems now to be buried in the almost impenetrable jungle.²⁶ Guidi speaks of terrace walls largely ruined, one of very irregular polygonal: on the summit a mass of ruins: on the side towards the saddle on the north-east a massive polygonal wall 2.20 m. thick, concave on the outer side. On the steep side of this hill overlooking the river-mouth, rather more than half-way up, is a small fort known as Kapılı Kızılı, not mentioned by Guidi. More than half of the perimeter is formed by the rock precipice; the side towards the mountain is defended by a wall 2.40 m. thick, of small blocks laid in fairly regular courses. This wall is for the most part reduced to a mere pile of stones, but at one point six courses remain standing. The diameter of this fort is about 20-25 metres.

(3) Above the western mouth of the river a fort guarded the Cedreae road at the point where it surmounts the crest of the hill; it is marked on the inset in the Admiralty chart, and mentioned by Guidi, loc. cit., under the name Göz-Bel. It measures 9 by 24 metres, and had a higher platform (presumably a tower) at the seaward end; the masonry was heavy rubble, approximating to long polygonal. We found no sherds here.

(4) There is a medieval or Turkish fort on a hill (alt. c. 150 m.) on the west bank of the river about half an hour from its mouth; it is apparently the one marked inland here on the inset in the chart. A fortification lines the crest and has a circular tower at the south end; it is mainly in smallstone work, but a small patch of heavier masonry on the summit by the tower may perhaps, despite the mortar in the joints, belong to an ancient tower here. The few sherds seem to be post-classical.

(5) On the summit of a high hill on the west side of the valley, some 350 m. above sea-level, is a small fort or large tower (Koca Kale) measuring 12 by 7.60 m.; it does not seem to have been previously visited. The wall is 1.20 m. thick; the masonry is irregular, approximating to ashlar,

²⁵ See Robert's remarks, *Ét. anat.* 497 and his pl. xxxix.

²⁶ Robert in 1934 evidently climbed the hill, since his

photograph pl. xxxix is taken from it; but what, if anything, he saw on it does not appear.

with blocks up to 1.50 m. in length, rather long in proportion to their height (PLATE 17 *c*). This wall stands to a height of 2 m. at the north corner, and great quantities of blocks are strewn over the slopes. The tower is divided into two compartments by a cross wall also 1.20 m. thick. We should judge this to be a pre-Rhodian fort of Carian construction. Lower down on the slope towards the village, perhaps 100 m. above the valley, are the remains of a platform some 20 m. across, with masonry similar to that at Kapılı Kızılı.

Midway between the fort (4) and the sea, near some cottages on the west edge of the valley, the ground is densely littered with fragments of wine amphorae; and there are two similar spots, one farther inland and the other towards the river-mouth. These seem to have been amphora factories. The amphorae, of a slim, apparently late form, were of reddish ware and c. 60 cm. high. We saw a marble block here, but no ancient foundations. On the other side of the river mouth Robert noted some insignificant remains;²⁷ and we saw an ancient block and a fluted limestone Doric column drum near the customs-house, whence also came the dedication of a thiasos (pp. 77 *f.*, no. 7). Considering the richness of the land, Gelibolu is surprisingly unproductive of antiquities, other than the hill-forts; this dedication and the fragment *ibid.* no. 8 are the only inscriptions yet discovered at Gelibolu, and we have neither seen nor heard of any ancient coins there. There does not appear to have been any ancient town there, though there was no doubt some habitation in the flat ground by the sea.

ÇETİBELİ

The fortified site called Asar (Çetibeli Asarı) crowns a steep hill rising directly above the hamlet in the well-watered and wooded valley of Çetibeli on the route from Marmaris to Gökova. The site is briefly described by Guidi.²⁸ On the hill-top is a citadel measuring perhaps 75 by 50 metres; it is overgrown with impenetrable scrub, but seems to contain some foundations of buildings. The citadel walls, 1.75 m. thick, are of stout masonry, in places quite well coursed, and standing several metres high; Guidi, speaking of the style as 'false polygonal', draws a comparison with Ceramus and dates this fortification to the fourth-third century B.C. At the north end the wall runs in a wide sweep to a partly projecting tower,²⁹ and there is another tower or casemate on a platform at the opposite end. The gate is in the east side (PLATE 17 *d*); it has a 'false arch', the top two courses of the jambs inclining inwards, and is 1.70 m. broad and 2.70 m. high in the middle.³⁰

The citadel is contained within an outer circuit, which runs close in under the citadel on the west but opens out at the ends to enclose a sloping shelf perhaps 80 metres broad along the east side. The extreme dimensions of the whole fortification might be about 170 by 140 metres, so far as we could estimate by point-to-point calculations in the scrub. The outer wall is 2.10 m. thick, but poorly constructed, and has undergone medieval repairs. On the east side there are projecting towers and arrow-slits in the walls. The outer gate, at the south end, is 1.70 m. wide and has a flat lintel slab. Outside the gate is a medieval building; and on the west, on a knoll just under the site, there are remains of a building which contained a circular oil millstone of the 'ashtray' type (but without the central knob) (PLATE 17 *e*). There may have been some ancient habitation below the circuit on the east.

²⁷ *Op. cit.* 497, n. 1.

²⁸ *Op. cit.* 376 *f.*, with photographs of the upper circuit, figs. 37–38. Cf. Robert, *op. cit.* 498.

²⁹ If, as we suppose, this is Guidi's fig. 38, it is certainly a part of the original design, since the two ends of the curtain are running in overlapping arcs and could not otherwise meet.

³⁰ This form of gate, presumably the predecessor of the

Hellenistic round-arched one, seems to have been common in the east Aegean between the second half of the fifth century and the beginning of the third; besides the well-known examples at Assos, the 'Acropolis of Old Smyrna', Heracleia ad Latmum, and Lysimachian Ephesus, we have noticed such gates at Termera (Asarlık, *BSA* l. 116), Samos (*AA* 1931, 289, fig. 37), Kozpınar (Calynda, *JHS* lxxiii. 26, fig. 23), and the dummy 'false arch' at Söğüt (above, p. 61).

Guidi noted that there were no sherds of the sixth and fifth centuries, but only black glaze, Hellenistic ware, and Hellenistic-Roman red wares; and our gleaning exactly confirmed this observation of his. The fortification thus seems to have been built in the fourth century, presumably as a Rhodian deme-centre. At the khan in the valley below the site we were shown a small Hellenistic Rhodian bronze coin, a denarius of Hadrian, bronzes of a third-century emperor and of Diocletian, and several Byzantine pieces.

The view from the summit of Çetibeli Asarı includes a corner of the plain of Gelibolu; and the site can be approached from Gelibolu in something over an hour by a steep ascent up a valley to a saddle where the Asar comes full into view. On either side of this ravine there is a track. Beside the northerly one (which leads from Çetibeli to Kızıl; see above, p. 65), at a spot called Karataş on the highest point of the crossing, we noted the foundations of two or three chambers which are now eroded to ground level; the walls are 0.60–0.75 m. thick, and the complex is c. 20 m. across. It may have been a guard-house.

FEREK

On a craggy hill some 300 metres high, close above the village of Ferek, ancient ruins have long been known to exist, but it seems that they have not previously been visited.³¹ The site, now known as Kızılasar or Kızılhisar, is in some ways reminiscent, though on a much larger scale, of that at Söğüt. On the east side is a high vertical cliff-face, and on the opposite (west) side a fine stretch of ancient wall some 40 metres long, still standing 5 metres high. This wall, 1.45 to 1.60 m. thick, is of quarry-faced ashlar with accurately horizontal courses but occasional rambling bed-joints; the vertical joints are slightly oblique here and there, producing technically a trapezoidal masonry. The courses vary from 0.50 to 0.80 m. in height. Towards its northern end the wall shows a more irregular style of masonry, though not enough so to be called polygonal. In the southern part of this wall is a gate 1.70 m. wide, only the lower part being preserved; in the wall of the gateway, on either side, is a deep slot about 0.14 m. wide, as if for a sliding door (not merely for a bolt or bar). The blocks at the outer corner have vertical draft-lines at the angles (PLATE 17*f*). About 10 metres north of this gate, where the wall makes a slight projection, is a cupboard-like recess 0.90 m. wide, 1.50 m. deep, and more than 1.80 m. high, in the inner side of the wall. Several blocks are missing from the wall of this recess, giving the effect of small windows or archery-slits. The rest of the hill-top is covered with the extensive remains of a medieval castle, in which ancient blocks have in some places been reused. There is an abundance of the usual characterless sherds, presumably medieval.

From its situation alone we should be at a loss to decide whether to class the site at Ferek as a frontier fort of the incorporated Peraea or an outlying position of the Idymians. But the masonry looks Rhodian, not Carian, and the site resembles the other deme sites in this vicinity (as, for instance, Söğüt). It may represent the Rhodian outpost in face of the Hecatomnid front at Thera and Callipolis, and correspond to the later fortification at Sarnıç at the frontier of the Subject Peraea.³² Altunsivrisi has the appearance of a large fourth-century deme centre, and Söğüt and Çetibeli Asarı of smaller ones. The valley of Gelibolu (Gallipoli) now offers the richest agricultural land in this heavily-wooded region, and though loosely inhabited it has the largest population;³³ the amphora factories in the valley and the ring of forts that we have

³¹ They are shown on Admiralty Chart no. 1604 and on Kiepert's map: cf. Robert, *op. cit.* pl. 30. Von Diest (*Petermanns Mitteilungen* 1909, 223) and Robert (*op. cit.* 483) passed close by without paying them a visit.

³² *Peraea* 76, with n. 1.

³³ The *muhtarlık*, which includes Taşbükü and Çetibeli, has 115 houses, of which (according to the *muhtar*) 70 are at Gelibolu.

described indicate that the land here was valued in ancient times, but our repeated investigations have shown that there is no ancient city or deme site in or around the valley. It must have belonged to one of the two neighbouring demes. The settlement above Çetibeli directly controlled the route to the Idymia; but it may also have controlled the land at Gelibolu. Cedreae is an enigma. The island contains a powerful citadel, with public buildings and decrees, and a theatre of hardly less than twenty tiers; but the island itself is small, and the adjacent coast at Taşbükü cannot have supported a large population. This may be explained in two ways. Either the Rhodians made Cedreae Island an important centre in their administration and equipped it with installations in excess of the needs of a small deme; or, alternatively, the land at Gelibolu may have belonged to Cedreae, which could thus have supported a considerable population. In any case, as a once-autonomous city, Cedreae seems to have had more of a tradition of civic behaviour than the neighbouring demes.

The picture of occupation north of Marmaris (Physcus) in Rhodian times seems then to be: Cedreae with its island fortress, which provided something of an administrative centre and probably a naval station for the Rhodians; a large deme, probably Euthena, at Altınsivrisi; and smaller deme-sites at Söğüt (Amnistus?) and Çetibeli. At the present day this region is strangely out of the world. It may be commended to those who enjoy unspoilt country or care to live *convenienter naturae*. So far as we are aware, there is no chair between Ferek and Erkiş, save for the two supplied by the government at the customs-house at Gelibolu.

IDYMA

No big river discharges into the Ceramic Gulf, and the silting process here has not been greatly advanced (as it has been in the Maeander and Cayster gulfs) during the two or three thousand years of human occupation of the land basin. The water in the gulf is still deep; only at the very head does the coastal plain creep imperceptibly forward, so that sea-going vessels no longer use the ancient anchorage at the north-east corner of Gökova bay, but moor at the *iskele* a kilometre to the west. The northern shore of the gulf is mountainous. To the west of Ceramus the coast 'forms low shingle points with cultivated plains between them, the hills in the rear being well wooded and backed by high mountainous land'.³⁴ But east of Ceramus the Kıran Dağ rises sharply from the sea to an escarpment reaching 3,160 feet above sea-level, being broken only at Akbük, where a sheltered harbour and a Hellenistic tower are reported.³⁵ Von Diest and, following him, Robert have given a picturesque description of this cliff as dropping sheer into the sea 'sans le moindre faille' from Gökova to Ceramus and not leaving room for even the faintest path.³⁶ But in fact, in addition to the harbour at Akbük, there is an *iskele* on this shore midway between Akbük and Gökova, with ancient stones reported at Hayıtlı near by and two paths leading down to it, and from the opposite coast occasional patches of cultivation can be descried at the mountain foot. There could not, however, have been an ancient city at the foot of the Kıran Dağ between Ceramus and Idyma.

Inland from the head of the Ceramic Gulf at Gökova (or Giova)³⁷ stretches a generally fertile plain, which is about 3 kilometres broad and extends 7 or 8 kilometres inland to a low sill dividing the waters flowing to the Ceramic Gulf from those which flow to the lake of Köyceğiz (Caurus).³⁸ On the north edge of the plain, between Kozlu Kuyu and the sea, copious springs

³⁴ *Med. Pilot* iv (5th edition, 1918) 345. This excellent description helps to explain how a Hellenistic city was apparently able to exist at Gökbel (*BSA* I. 135).

³⁵ Paton and Myres, *op. cit.* 197; Guidi, *op. cit.* 385 f., fig. 44. Cf. *Med. Pilot* iv. 344.

³⁶ *Pet. Mitt.* 1909, 223; Robert, *op. cit.* 478.

³⁷ By softening of intervocalic *k*. The Greek Portolan ii speaks of the gulf here under the name H. Kosmas and also gives the name τὰ Κιόβα (*Delatte, Les Portulans grecs* 248).

³⁸ For descriptions of the plain see *Med. Pilot* 342 f. and Robert, *op. cit.* 479.

give rise to the short but deep Kadın river; presumably they are outlets of water collecting in mountain basins north of the Sakar Kaya; other such discharges are remarked by Paton and Myres under the Kıran Dağ farther west.³⁹ The *Mediterranean Pilot* warns mariners against the miasma arising from the Kadın, which 'proves fatal to the inhabitants', who 'look cadaverous, and are apparently not long-lived';⁴⁰ and Robert was still able to sense the insalubrity in 1934 when sleeping on the hill-side above.⁴¹ But the recent campaign against malaria seems to have struck at the root of the pestilence, and the place now appears prosperous. Robert gives some excellent views of Idyma.⁴²

The identification with Idyma is due to Cousin and Diehl, who discovered the base of a dedication to Vespasian by the κοινὸν τῶν Ἰδυμίων, apparently at the old *iskele*.⁴³ But Robert seems to have been the first to call attention to the classical citadel site. This stood at an altitude of c. 300 metres above Kozlu Kuyu where a narrow crest springs broadside on from the steep mountain flank of the Sakar Kaya.⁴⁴ The crest was walled to form a fortified summit something over 200 metres long, which presents a side not more than 20 metres high to the mountain slope on the north and has the appearance of a great ship perched on the side of a gigantic wave. We give a plan, FIG. 3. The circuit can be followed along the north edge, but on the side facing downhill the citadel is protected by bluffs and there is little surviving trace of walling. The masonry is generally roughly coursed, tending to rubble; but at a couple of points⁴⁵ we noted regular ashlar work. The citadel wall seems to have a thickness of c. 1.40 m.; in the middle part of the north side the bottom courses are stepped outwards and of flimsier construction than those above. The very narrow central part of the citadel crest seems to have been occupied by a house or 'keep' with a number of rooms; and beyond this on the west is a long area at a level some feet lower, which contains a sunken cistern in more or less coursed masonry measuring 10 metres by perhaps 6. East of the 'keep', and lying at a considerably lower level, is an area littered with stones and overgrown with bushes. The circuit wall here has a tower on the exterior and a row of seven little buttresses projecting a metre inward from the inner face. The fortified crest rises again at its north-east end to a sort of rocky poop. From another rocky bluff below this on the east we were able to pick up the line of an outer circuit wall, 1.95 m. thick and built in heavy rubble masonry, which appears to have run for several hundred metres downhill, and then to have turned along the hill-side towards a prominent spur under the south-west part of the citadel; we did not have sufficient daylight to allow us to trace its course to the spur, but the presence of terrace walls and sherds indicates that there was regular habitation within this apparent circuit. In this sector below the citadel our plan is marginal and of very little value.

We noted a fair number of fourth-century black-glazed sherds, with one striped fragment of perhaps an earlier date. Hellenistic pottery and tiles were abundant, and we also noted some red ware resembling early eastern (i.e. late Hellenistic) sigillata; but we saw nothing of Roman date. At Kozlu Kuyu under the site we saw a bronze coin of Cassander, two Ptolemaic and some Rhodian Hellenistic pieces.

This site seems to be the classical Idyma, ruled by a dynast⁴⁶ whose stronghold was presumably

³⁹ Op. cit. 190.

⁴⁰ Op. cit. 342 f.

⁴¹ Op. cit. 484, n. 3.

⁴² Op. cit. pl. 31, 1 (looking south over Kozlu Kuyu and the plain), 2 (looking south-east over the Kadın towards Duran Çiftlik); pl. 32, 1 (looking west-south-west over the gulf and the flank of the Kıran Dağ), 2 (looking south-west over the plain to Ferek and Altunsivrisi).

⁴³ BCH x. 428 f.

⁴⁴ A view from the south, looking up towards the site, Robert, op. cit. pl. 33.

⁴⁵ One is illustrated, Robert, op. cit. pl. 34, 1; we suppose it to be the stretch of circuit that we have marked on the south side on FIG. 3.

⁴⁶ Paktyes in the Athenian tribute lists of 453/452 and 451/450 (ATL i. 288). Nesselhauf, *Klio* Beih. xxx (1933) 126, n. 2, remarked that Πακτυες Ἰδύμ- might be a pair of ethnics; and Robert refers to him and speaks of Paktyes' domination as being (at the most) momentary (op. cit. 473). But the only other instance of such coupling in the lists of the first assessment period is the entry Πικρες Συαν[γελ-],

on the citadel. Though the territory of Idyma extended to the coast, the city itself in classical and Hellenistic times was high on the mountain-side at a distance of 3 or 4 kilometres from the

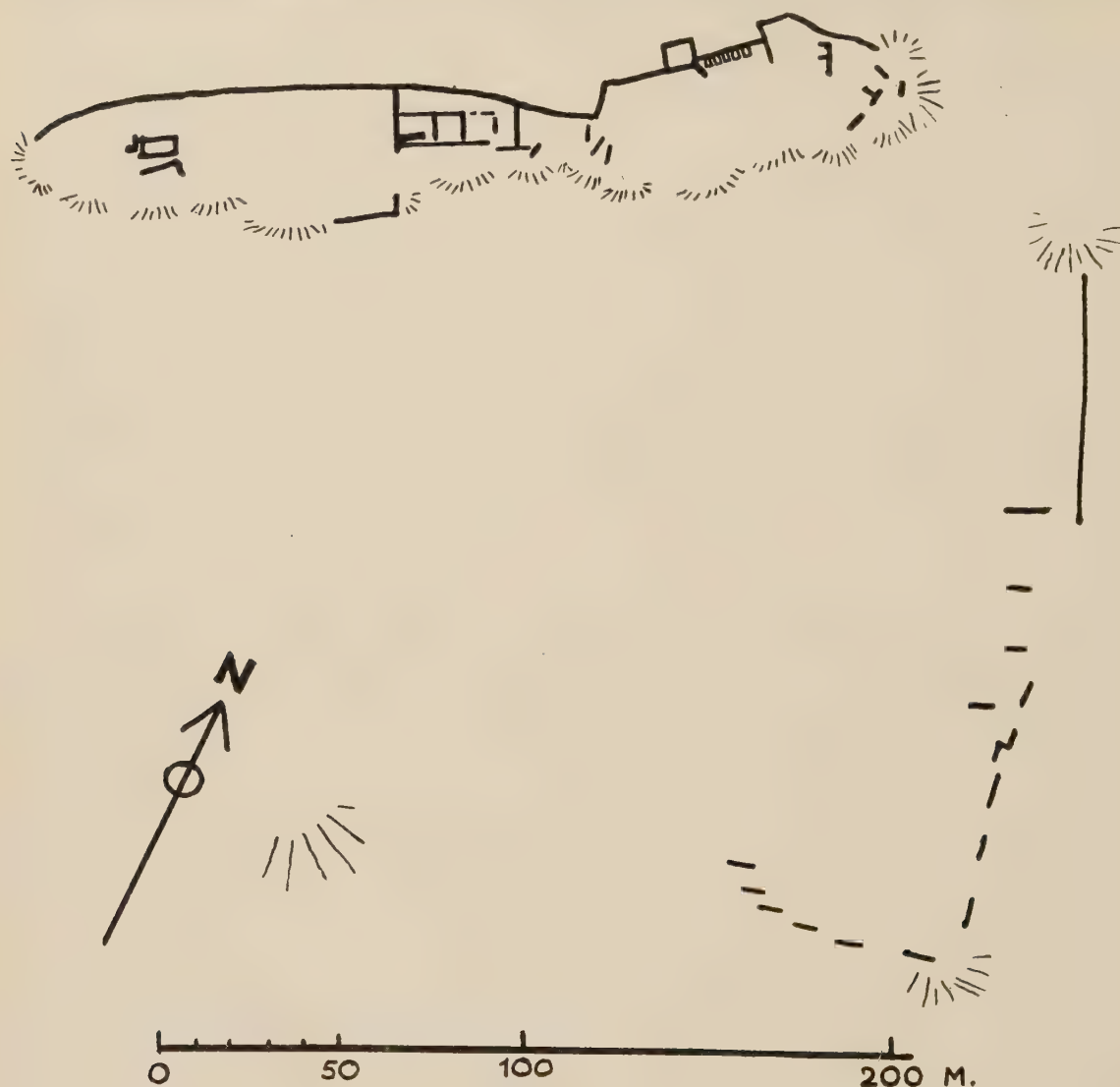


FIG. 3. IDYMA: PLAN OF CITADEL

sea; and it was no doubt this peculiarity of their situation which enabled the Idymians to withdraw from the Athenian League about 440 B.C. Idyma seems to have been a place of some consequence, to judge by the extent of the site; both the amount of the tribute, exceeding a talent in the first assessment period, and the classical silver coins with legend ΙΔΥΜΙΟΝ support this

and here an ethnic Πικρῆς can be definitely ruled out. At both Idyma and Syangela we find that the dynast's name is omitted in lists 7-8 and continuously on through the third and fourth assessment periods. Pigres of Syangela reappears in list 23; Paktyes (or his successor) does not reappear, for

the Idymes had dropped out of the lists in the fourth period. Thus, for the period during which Idyma was in the league, the evidence for the existence of a dynasty there is precisely the same as that for the dynasty at Syangela, and there is no reason to doubt that Paktyes is a dynast's name.

estimate. In addition, below the city-site there are two groups of rock-tombs with angular-vaulted chambers and architectural façades. West of Kozlu Kuyu, at a place which Guidi calls 'Descemeli Jol' (i.e. 'Paved Road') and Robert calls 'Inönu' (*sic*), there are five tombs, of which Guidi has given a description.⁴⁷ Three of them have simple entrances; but the other two have a deep portal in front of the vaulted tomb-chamber, with Ionic architectural decoration on the faces. Guidi's no. 2⁴⁸ seems to have had a central pillar in the entrance. His no. 4⁴⁹ is quarried clear of the rock so that one can pass right round the back of it, and it had an elaborate distyle-in-antis façade; the doorway of the tomb-chamber has a carved surround, and over the lintel receding fasciae with a spiral bracket on either side.⁵⁰ Secondly, a little above the north-east corner of Kozlu Kuyu village is a cemetery discovered by Robert, consisting of numerous rock-tombs cut in the steep hill-side, with rectangular apertures for the doors and similarly vaulted chambers. Among them one fine architectural tomb stands out;⁵¹ it has a shaft in the floor of the chamber, and its badly worn Ionic decoration closely resembles that of Guidi's no. 4. Guidi inclined to a date in the fourth or third century B.C. for the Dösemeli Yol tombs, and Robert dates his fine tomb in the fourth century at the latest. The two distyle tombs are clearly to be referred to a single design, as also (in our opinion) are those at Elmalı (below, pp. 73 f.); Guidi's no. 2 is of the same type, apart from the fact that it had only a single column. To the same class belongs a fine distyle tomb (which is accompanied by a Chinese-gabled hut-tomb cut clear from the rock) in a cliff at Çamköy near Yenice on the plateau behind Idyma (PLATE 18 c-e);⁵² and similar tombs are found in Lycia, at Caunus, and in the Cibyratis. The tomb of Amyntas at Telmessus, which is strikingly similar to the distyle tombs of Idyma, was dated by Benndorf and Niemann something after 400 B.C.;⁵³ and Paton noted the inscription Νίκωνος Απολλωνίδου in fourth-century letters on the architrave of his fine Ionic tomb.⁵⁴ We believe that the columnar Ionic tombs of the Idyma region reflect good eastern Ionic models and should date around the beginning of the fourth century. In view of the apparent stability of the Carian dynasties in classical times (see below, pp. 143 ff.) we have little doubt that Idyma was under the rule of a dynasty at this time, and that the fine architectural tombs, like the contemporary coins of Idyma, are reflections of this rule.⁵⁵

At the modern *iskele* we noted no trace of antiquity save the niche remarked by Newton in a cliff face.⁵⁶ But at the old *iskele* close to the north-east corner of Gökova bay there are substantial ruins and remains stretching back from the beach. These seem to be of Roman imperial and Byzantine times; and there seem also to have been late built tombs in the vicinity.⁵⁷ On the crest of the rounded promontory between the two *iskeles* there is an indistinct trace of heavy masonry, perhaps of a watch-tower sited so as to look down the gulf; and on the east side of this promontory above the old *iskele* we noted traces of a rubble-built basilica or church measuring c. 27 by 18 metres, with three apses at the east end, which may possibly be the H. Kosmas

⁴⁷ Op. cit. 370 ff. For other references see Robert, op. cit. 482.

⁴⁸ Loc. cit. fig. 32.

⁴⁹ Loc. cit. figs. 33-34; Robert, op. cit., pl. 36. 2; the right-hand anta, with the corner of the entablature, has now collapsed.

⁵⁰ The fasciae here and on the antae had no doubt painted Ionic decoration, as was noted on the tomb of Amyntas at Telmessus (see below). Paton and Myres remarked painting on the façade of the upper tomb at Sandama (*JHS* xvi. 261 f.); cf. Guidi's 'intonaco' on this tomb no. 4.

⁵¹ A row of tombs here, Robert, op. cit. pl. 34. 3; the architectural one, *ibid.* pls. 35, 36. 1.

⁵² The distyle tomb has six graves inside; for the position cf. Paton (below, n. 54), Hula-Szanto, *Bericht über eine Reise*

in *Karien* 34, Laumonier, *BCH* lviii. 344.

⁵³ *Reisen in Lykien* 41, 112, pl. 17 (the inscription 40 no. 9); cf. Hirschfeld, *Paphlagonische Felsengräber* 31, n. 2.

⁵⁴ *CR* ii. 328 f., *JHS* xvi. 260 (a); from Paton's correspondence with Myres, which by the generosity of the latter we were able to read, it is certain that the phrase 'the inscription NO' was a misprint for 'the inscription No. 9'.

⁵⁵ We recall that Benndorf and Niemann likewise were convinced that the very similar tomb of Amyntas at Telmessus must have been a princely tomb and not that of a private citizen (*Reisen* 41).

⁵⁶ *Halicarnassus* ii. 626.

⁵⁷ We have nothing to add to the existing descriptions of this site; cf. Robert, op. cit. 480.

from which the inner gulf received its medieval name.⁵⁸ The old *iskele* was presumably the flourishing port of Gökova of which Evliya Çelebi made mention in the seventeenth century.⁵⁹ It may well have had some importance in Roman times, to judge by the visible remains—the more so if the old city on the mountain-side was abandoned by then.

Above the springs on the north edge of the plain, between the old *iskele* and Kozlu Kuyu, a crest stands out from the foot of the mountain in a manner very similar to that of the classical citadel already described; it is crowned by the medieval fortification of İnişdibi, which has been frequently described by travellers;⁶⁰ ancient polygonal masonry has been remarked at the west end, but we missed seeing it. Guidi and Robert have reported ancient and Byzantine remains on the edge of the plain under the fortress. In this vicinity the *Mediterranean Pilot* remarks as ancient two bridges and the paved road leading in the direction of Marmaris.⁶¹ On the south edge of the plain, at Asımbağçesi forty minutes east of Akça Pınar, Robert noted a ruined church (or monastery) and ancient blocks, but no ancient site;⁶² and von Diest remarked the foundations of a fort on the Zeytin Beleni on this side of the plain.⁶³

THE KARABÖRTLEN DISTRICT

The Idymian plain is closed on the east by a range of low hills, beyond which, at a somewhat higher level than the plain of Idyma, a broad flat valley extends as far as Karabörtlen, formerly Kiroba (Giraba, Groba, &c.). The road from Gökova İskelesi passes by Duran Çiftlik, Kızılyaka, and Sarayyanı to Karabörtlen, where it joins the Muğla-Fethiye road; it is much used by the lorries of the mining company at Karabörtlen. South of Kızılyaka is a disused aerodrome. This valley is bounded on the north by a range of hills, rising at two points over 300 metres, which separates it from a parallel valley affording an alternative, and equally easy, route from Karabörtlen by Elmalı and Dereköy to the head of the gulf at Gökova. Beyond Karabörtlen the road continues to be easy as far as Caunus and Calynda. This broad sleeve which runs from Idyma to Caunus is worthy of remark; it is in itself good land, and it provides an unobstructed easy passage across southern Caria. The northern part of this important highway has remained hitherto almost unexplored:⁶⁴ it contains, however, several important sites.

Duran Çiftlik

This lies at the west end of the plain of Kızılyaka. The farm is on level ground, with pine-clad hills to the south; on gently rising stony ground to the north-west faint traces of stone foundations may be discerned. Numerous ancient marbles have come to light in the garden of the farmhouse; we saw there a number of marble blocks (two with cramp-holes), and it is clear from the remnants that very many have been broken up; we also saw a slender marble column shaft, a funerary stele with two figures clasping hands (PLATE 16 *d*),⁶⁵ and fragments forming the greater part of a semicircular marble exedra with projecting pilasters at the corners and a coiled snake carved on the return (PLATE 16 *e*).⁶⁶ We saw no ancient potsherds or evidence that in antiquity this was an inhabited site. The farmhouse is of very recent construction. The owner informed us that traces of a building with mortar had come to light in the garden, and the tiles

⁵⁸ Cf. above, n. 37, and Tomaschek, *zur hist. Topographie v. Kleinasien im Mittelalter* 39.

⁵⁹ See Robert, op. cit. 481, n. 1.

⁶⁰ See especially Guidi, op. cit. 369 f., fig. 30; cf. Robert, op. cit. 481 f., pl. 34, 2.

⁶¹ iv (1918) 342. But see Wittek, *Das Fürstentum Mentesche* 172.

⁶² Op. cit. 488, 497.

⁶³ *Pet. Mitt.* 1909, 223.

⁶⁴ For Cousin's 'Kara-Burtlen Assar' see below, p. 74, n. 69; L. Robert in 1934 does not seem to have pursued his investigations east of Duran Çiftlik. It is not at all easy to relate this terrain to Kiepert's and Philippson's maps.

⁶⁵ Ht. 0.69, width 0.34, thickness 0.095 m. The stone is not marble, but has a rough surface.

⁶⁶ Ht. of back 0.88 m.; ht. of seat 0.36 m. The back and ends have plain mouldings at top and bottom.

that we saw seemed post-classical; a Byzantine church was mentioned by Hula and Szanto. The nature of the finds and the wealth of marble, taken in conjunction with Hula and Szanto's discovery here of the base of a dedication to Domitia,⁶⁷ leave no room for doubt that this is the position of an ancient sanctuary.

About 2 kilometres east of Duran Çiftlik and 1 kilometre south of Kızılyaka an isolated house stands on the edge of the airfield just south of the river. Ancient and Byzantine blocks are built into the walls of the house, including two slabs with crosses and peacocks. In the vicinity we noted part of a Doric capital with deep flutings on the neck, a shaft with shallow Doric flutes, and pieces of unfluted columns; the ancient marbles may have been brought from Duran Çiftlik in Byzantine times. We saw no remains of antiquity in Kızılyaka village.

Elmalı Kaləsi

The small village of Elmalı lies a short hour west-north-west of Karabörtlen; the approach is by the northerly valley mentioned above. About 2 kilometres west of Elmalı a conical hill in a recess on the north side of the valley is crowned by a substantial ancient site. The hill (PLATE 19 *d*, seen from the south) falls sharply to a ravine on either flank (that on the east having a good head of water in the summer) and rises to a peak detached from the hillside at the back. We should estimate its altitude at 150 metres above the valley.

The site is much overgrown, so that we were not able to make a plan and photography was unrewarding. On top is a roundish citadel with a maximum diameter of upwards of 100 metres. Inside this circuit are foundations of several substantial buildings in dry masonry, and a medieval cistern. On the highest point was a building, perhaps a tower or keep. The citadel walls are in dry rubble of fairly sound construction, tending to regular courses. At the north end are remains of a circular tower perhaps 16 metres in diameter; it was built in squared masonry and has been repaired in small-stone work (apparently in medieval times); where this tower joins on to the citadel on the east side there appears at some time to have been an opening 2.60 m. wide, evidently for a gate approached by a steep stair. We measured the thickness of the citadel wall as 1.85 m. PLATE 19 *e* shows a piece of its face at the south end of the citadel (γ on PLATE 19 *d*); here again the upper part shows later repairs. Sherding was bad inside the citadel, but we found some ancient pottery (including black glaze) and medieval glazed wares. Just outside the citadel wall, in what appeared to be spill from it, we picked up an archaic-looking striped fragment and a sherd from an Attic crater, probably of the later fifth or early fourth century.

The citadel is approached from the south by a zigzag path, which is stepped in places with laid blocks. About halfway up the hill, where the path bends, there is a fort set on a natural bastion of rock (α on PLATE 19 *d*); it is of irregular outline, *c.* 22 metres long and strongly built. Above this the line of an outer circuit appears (β on PLATE 19 *d*). It is in solid masonry and appears to run for a considerable distance in the scrub; above the torrent on the west side of the hill there runs a fortification wall, which we took to be the continuation of the outer circuit; it reappears at the north end under the citadel. The thickness, at the point where we measured it, is 1.60 m. We noted house foundations, with tiles and pottery (including black glaze) inside this circuit, and also continuing for some distance below it on the south side. At the foot of the hill here are sparse marble blocks; and cist graves are reported behind the hill to the north.

So far as we are aware, no record exists of this site. Yet it is a substantial one, comparable in scale with the classical sites of Idyma, Cindya, Termera, and Cos. The importance of the place in ancient times is underlined by our discovery of a pair of rock-cut tombs with angular-vaulted

⁶⁷ By the Kallipolitai, *Bericht über eine Reise in Karien* (SB Wien no. 132) 34; see below, p. 81.

chambers and architectural façades, which are hewn side by side in the rock on the north edge of the valley bottom just east of Elmalı village. Like those at Idyma, they face south—no doubt for the comfort of the occupants. The tomb on the left was cut clear of the rock, like Guidi's no. 4 at Idyma (p. 71), save that a strut was left joining the right anta to the rock at the top; it has exterior measurements of *c.* 6.75 by 5.00 m. The entry to the chamber was blocked by beehives at the time of our visit. The front of the tomb is largely obliterated and badly placed for photography. The carved doorway into the chamber had a moulded lintel with spiral brackets like Guidi's no. 4, and the extant right anta of the façade shows like decoration, with a trace of the dentil frieze and pediment above; we have therefore no hesitation in recognizing here, as at Idyma, a columnar Ionic tomb. The architectural design in fact appears to be identical. The second tomb is smaller and not detached from the rock. It is in a similar architectural style, with antae and with a moulded lintel over the doorway; to the left of the door a socket, higher than broad, is cut in the front wall.⁶⁸ The interior of the chamber is *c.* 2.75 m. square, and 2.20 high at the apex; there is a shaft in the floor and a sarcophagus 2.25 m. long cut in the rock against the back wall.

Hisarlık

At the eastern extremity of the range dividing the two valleys, on a hill some 80 metres high, in full view of Karabörtlen at a distance of twenty minutes across the plain, is a smaller site now known as Hisarlık. The top of the hill is encircled by a good solid wall from 1.85 to 2.45 m. thick, of rather rough polygonal masonry, with small stones here and there filling the gaps. On the south-east side a fine stretch is preserved to a height of 3.5 to 4 m., making a right-angled turn; one block here measures 1.35 by 1.12 m. in maximum dimensions, and at a corner a little to the west, where the masonry is almost regular, another block measures 1.60 × 0.85 × 1.00 m. This ring-wall encloses a space some 125 m. long from east to west and a bare 100 m. in breadth. At the highest point are the foundations, hardly rising above the ground, of a rectangular building about 20 by 9 m., with walls 0.70–0.75 m. thick. Other interior walls about 0.70 m. thick are visible in various places, flush with the ground. Lying on a level space below the summit on the west is a handsome architectural marble block 1.75 m. long. The hill is steep on three sides, but on the south-west slopes comparatively gently down to the village of Sarayyanı; on this slope, below the ring-wall, are abundant traces of houses and other buildings, and a 'Carian' sarcophagus tomb now flush with the ground. At the north-east foot of the hill, close beside the road, is a more handsome tomb of this same type, approached by rock-cut steps. This site, though clearly a seat of permanent habitation, is perhaps hardly of sufficient consequence to be an independent city.⁶⁹ In a Turkish cemetery in the northern valley, about 1 kilometre north-west of Hisarlık, are several architectural blocks, including a piece of architrave with

⁶⁸ Cf. the similar socket over the door of Robert's tomb above Kozlu Kuyu (p. 71).

⁶⁹ We are inclined to think that Hisarlık is probably the site described by G. Cousin in *BCH* xxiv (1900) 42, under the name Kara-Burtlen Assar, 'en face de Groba. Sur une colline faisant partie de la chaîne qui sépare Groba de Djova et de Kara-Agatch [this is not really intelligible] se trouvent les ruines d'une ville qui semble avoir été assez importante. En plusieurs endroits le mur est assez bien conservé et, surtout du côté de la plaine, on le suit facilement. Il est construit en appareil irrégulier, qui du côté de la montagne est en très bon état. Ce sont de gros blocs de cette pierre grise que l'on trouve partout dans le pays. Ils

s'ajustent ensemble assez bien, et les vides sont remplis par des pierres de moindre dimension. . . . À un coude il y eut autrefois, soit un escalier, soit plutôt une tour carrée. La saillie rectangulaire est en appareil régulier. . . . Sur la côte ouest plusieurs redans. Il y a en tout plusieurs rangées de murs, qui semblent parallèles. . . . Au dessous du mur vers la montagne du côté sud, il y a encore des restes de monuments et édifices importants. . . . Saraikli, petit village au SE de la colline qui porte ces ruines.' This could hardly be called a good description of Hisarlık, but the points of resemblance seem enough to make the identification probable. We could learn of no other site 'en face de Groba', and in fact Saraikli (unknown) seems to correspond to Sarayyanı.

three fasciae and an unfluted column-drum. This spot is called Kilise, though there are no visible signs of a church.

Asar

The third site (PLATE 19 *c*) is farther to the west, at the highest point of the range dividing the two valleys, and commanding both, directly above the village of Kızılyaka: it is known as Asar, and has a view to the sea on the west and to the lake of Köyceğiz on the east. The hill-top is fairly steep and largely bare; the slopes are thickly covered with sherds and loose building-blocks. On the summit are the remains of a tower about 7 by 13 m., in poor-quality masonry of small blocks arranged in some semblance of courses. No ring-wall is visible above ground, but a clearly-defined shelf is traceable most of the way round the hill-top, and it seems almost certain that this must mark the line of an ancient wall.⁷⁰ Below the summit on the east is a modern house, close to which are six or eight simple graves, consisting of an outline of thin stones set on edge and a covering of stone slabs. In the hill-side close by is a spring. A little to the east of the house is a rocky knoll, on the south slope of which is a rectangular enclosure some 8 by 10 m. in area; its walls, about 0.70 m. thick, are well constructed of small blocks laid without mortar in two facings with small stones in between. In the interior is a base or foundation about 3 m. long by 1.50 m. wide; the purpose of this is not clear. A handful of coins seen at the house and said to have been found on the hill included a small Rhodian bronze and a number of Imperial denarii. Among the sherds on the hill-top Roman ribbed ware is to be distinguished.

INSCRIPTIONS (RHODIAN PERAEA)

1. Marmaris (anc. Phycus); formerly lying by the shore, now in the school, part of a rectangular base subsequently converted into a double half-column, originally carrying two

inscriptions. Present measurements 0.38 × 0.71 × 0.33 m.; broken on the left. Regular letters of the Roman period, 24–25 mm. high.

(a) -----
[σαντ]α εὐνοίας ἔνεκα
θεοῖς

(b) [. . .] ΙΟΣ [-----]
[πρυ]τανε[ύσαντα ----]
[. . .] ΝΤΑ [-----]
σαντα κα[λῶς καὶ ἐνδόξως]
καὶ πάντα [πράξαντα τὰ συμ]-
φέροντα [τῷ δάμῳ, εὐνοίας]
[ἔνεκ]α *vac.* [θεοῖς]

2. Between Söğüt and Karaca, at a spot called İçme, now used by charcoal-burners; on the seashore, partly under water when we saw it, a limestone block 1.03 m. long,

0.36 m. high, 0.46 m. thick; damaged at the top, otherwise complete. Letters 19–20 mm. high, of Hellenistic date.

[Ἰάσ?]ονος [. . .] Ε [. . .] Ν [- -]
[κ]αθ' ὑποθεσίαν δὲ Ἱεροκλεῦς,
[Ἀ]μνιστίου

For the probable location of Amnistus at Söğüt see above, p. 61.

3. Altınsivrisi, among the ruins on the summit, just below the highest point on the north-west side; a fallen wall-block 1.54 × 1.08 × 0.40–0.50 m., the inscribed surface roughly

smoothed and tooled intermittently at the lower edge. The inscription, in letters 4–8 cm. high, is oblique to the edge of the stone. Facsimile FIG. 4.

⁷⁰ The total disappearance of the wall itself is remarkable, but we observed much the same thing in connexion with the outer perimeter wall of early Cnidus (see *BSA* xlvii. 176,

n. 22) and elsewhere. It is hardly conceivable that the Asar site can have been unwallled; it is certainly not merely a sanctuary site.

ΝΙΚΟΚΛΗΣ

This inscription seems to be a mere graffito. The letters might well be of the fourth century B.C., but other considerations, and especially the fact that the writing is not parallel to the edge of the block, suggest that the name was written after the stone had fallen to its present position.

ΝΙΚΟΚΛΗΣ



FIG. 4. ALTINSIVRISI, INSCRIPTION (NO. 3)

4. Ovacik, at the foot of Altunsivrisi, at the door of a house; the third century B.C., almost without apices, 20–22 mm. high.
a rectangular base surmounted by a circular base-moulding, 0.30 m. high, 0.53 m. wide, 0.53 m. thick. Elegant letters of

Ἀριστοκράτει τοῦ
Ἀλεξάνδρου
Εὐθηνίτα

For the identity of Euthena with Altunsivrisi see above, pp. 63 f.

- 4a. According to information received in Marmaris, there is, or was recently, at Ovacik another inscribed stone which we did not see. Our informant's copy read ΛΕΝΑΙΟ, perhaps part of the name [Πτο]λεμαῖο[s].
5. Cedreac, on the island; about 30 yards east of the main temple, a rectangular base surmounted by a circular base-moulding, broken on all sides. The inscribed face is 0.27 m. high and 0.47 m. wide; the original width was about 0.72 m., but the left portion is missing. Letters 27–30 mm. high, apparently of the fourth century B.C., but the inscription is almost totally effaced, and the date is not guaranteed.

[----- Κλ]εώνυμ[ος]
[τοῦ δεῖνος Κε]δρεάτα[s]

Other cases than the nominative are equally possible.

6. Cedreac, on the mainland; in the necropolis beside the harbour, uncovered in 1956 in the course of clearing the ground for an olive plantation, a plain block of pale-grey limestone 1.00 m. high, 0.38 m. wide, 0.30 m. thick, lying in front of a built tomb on the south side of the harbour. Irregular script of the second century A.D., varying in height from 45 mm. in line 2 to 20 mm. below. Top right corner and right half of last two lines damaged. Squeeze (PLATE 19 a).

χαίρετε παροδε[ῖται]
Νεικασίωνος [β' ?]
Μυνδίου καὶ τᾶς γυν-
αικὸς αὐτοῦ Ἀπολλο-
5 δότης Διονυσόδωρου
Κνιδίας καὶ τοῦ υἱοῦ αὐτοῦ
Πρωτογένου Νεικασίωνος
Κεδρεάτα, κατασκευάσαν-
τος ἐκ τῶν ἰδίων· μεταλλά-

- 10 ξαντος δὲ καὶ τοῦ ἀδελφοῦ
μου Ἑκάτωνος Νεικασίω-
νος Μυνδίου καὶ τοῦ υἱοῦ αὐ-
τοῦ Νεικασίωνος Ἑκάτωνος
Κεδρεάτα καὶ τᾶς γυναικὸς αὐτοῦ
15 Σωτηρίδος, εὐνοίας ἔνεκεν τῆς
πρὸς αὐτοὺς ἀπεθέμην αὐτοὺς
ἐν αὐτῷ· ἐνεύχομαι δὲ τοῖς κλη-
ρονόμοις μου τὴν τῶν Αὐτο-
κρατόρων τύχην μηδενὶ ἐξ-
20 εἶναι τεθῆναι εἰ μὴ Ἀφροδει-
σίῃ τῇ γενομένῃ μου γυναι-
κί· εἰ δέ τις ἐπιχειρήσει ἀνοϊ-
ξαι, ἐκτεισέτω [ἱερὰ τῷ Πυ]-
θίῳ Ἀπόλλ[ωνι * . .]

Neikasion, owner of the tomb, is evidently son of Neikasion (cf. lines 10–11), so that probably we should read [β'] at the end of line 2; there is perhaps just room for one letter where the edge of the stone is chipped. The old rule by which foreigners on Rhodian soil were named without patronymic is no longer observed in the present inscription.

Myndians are remarkably common on Rhodian territory. In the present case Neikasion and his brother are citizens of Myndus, while the younger generation has taken Rhodian nationality. The remarkable mixture of Doric and Attic *koine* in the inscription is perhaps a reflexion of this divided loyalty. Other Myndians occur (at an earlier date) in no. 11 below.

The formula of adjuration in lines 17 ff. is well attested, though not common: cf. *IG* v. 1. 1208, 50, ἐνεύχομαί τε ὑμῖν θε[οὺς καὶ θεάς] καὶ τὴν τῶν Σεβαστῶν τύχην . . . ποιήσασθαι πρόνο[ιαν] κτλ. The present is the first time we have seen it in an epitaph.

Pythian Apollo is already known at Cedrae from two inscriptions published by Maiuri in *Ann.* iv–v (1922) 478–9, nos. 31 and 33,⁷¹ where he is coupled with Ἀπόλλων Κεδριεύς.

7. Gelibolu; now in the school at Marmaris,⁷² a block of white marble 0.61 m. long, 0.18 m. high, 0.075 m. thick; the stone has subsequently been tapered away at both ends, but the upper and lower surfaces are original. Inscription

in letters of Hellenistic date 18–19 mm. high, badly worn in lines 1 and 4. Squeeze and photograph, supplemented by a charcoal reading.

[τὸ κοι]ν[ὸν τ]ῶν Ἀλιαστᾶ[ν]
Πολεμακλείων
τῶν σὺν Ἀλεξάνδρῳ
Ἀντιοχεῖ
vacat

The text is complete, and the purpose of the inscription was no doubt plain from the nature of the monument to which it was attached. But possibly [τοῦ κοι]ν[οῦ] should be restored in line 1; the inscription will then be similar to Maiuri, *Nuova Silloge* no. 44, Σωτηριαστᾶν κοινοῦ τοῖ[?]
σὺν Ἀφροδισίῳ ἀρχαγέται, which is there classed (though for what reason is not clear) as sepulchral.

This type of religious society is characteristically Rhodian; this, and the use of the Doric

⁷¹ No. 33 was republished in *Peraea* 45, no. 42.

⁷² The provenience was confirmed to us personally by a local resident who had his information from the soldiers

who dug the stone up near the *karakol* (now the *gümruk*) at Gelibolu in 1949.

dialect, establish a presumption (though not a certainty) that Gelibolu was on incorporated Rhodian territory.⁷³

8. Gelibolu; built into a house on the west side of the valley, a fragment of moulding 0.20 m. high, 0.20 m. wide:

inscription on the rim at the top, in irregular letters about 25 mm. high of Christian date.

[ᾱ]γαπαύσεος

9. Kozlukuyu (anc. Idyma); in the wall of the house of Mustafa Yasakçı, a fragment of grey limestone 0.16 m. high, 0.27 m. wide, thickness not ascertainable; inscription

complete on the left in lines 1-2, broken on all other sides. Letters 19-23 mm. high, not earlier than the first century B.C.

[Ὶδυμίων τὸ κοινόν? ὑπὲρ]
Πρατοφῶν[τος]
φῶντος Ὶο[δίου, στρατη]-
[γ]ήσαντος ἔ[πὶ τὸ πέραν?]
5 [θεοῖς]

Or [ἐπιστα|τ]ήσαντος ἔ[ν e.g. Ὶδύμοις]. But *tau* has a long crossbar in this inscription, and there is not really room for it in line 3: [στρατη|γ]ήσαντος is therefore preferable. For these officials see *Peraea* 82-83, 87-88.

10. Akyaka, west of Kozlukuyu, where the road to the Iskele diverges from the main road; built into a wall across the road from the coffee-house, a block 0.26 m. high, 0.41 m. wide, thickness not ascertainable; broken on all sides

except perhaps at the top. Letters 18 mm. high in lines 1-3, decreasing to 13 mm. at the bottom. The date we should judge to be the latter part of the second century B.C. Squeeze, PLATE 19 b.

[ῚΠ]αίνετος Μενίπῶν [toponymic]
[ἱερ]ατεύσας Λητοῦς κ[αί]
Ἀφροδείτης
[- τ]ων Ὶρμοκράτειος Κοτείτ[ης]
5 [ἱερ]ατεύσας Λητοῦς καὶ Ἀφροδε[ίτης]
[- σίμαχος Ἀπολλωνίου Πατ[- -]
[ἱερ]ατεύσας Λητοῦς καὶ Ἀφροδε[ίτης]
Στράτων Ἀντιδ[- -]
τοῦ Θυσσου Σ[- -]
10 [ἱ]ερατεύσας [- -]

The inscription was not all written at once. As far as line 7, apart from the greater size of lines 1-3, the script remains perfectly consistent; in particular, the forms of *pi* and *phi* are characteristic. Lines 8-10, on the other hand, are not only separated from the lines above by a blank space and start much farther to the right, but also show distinct differences in the forms of the letters, especially *alpha* and *omega*. It appears that the names were added year by year, a perfectly normal proceeding; lines 1-7 are no doubt the work of a single stonecutter.

It is unfortunate that the greater part of the toponymics is lost. Κοτείτ[ης] in line 4 may be restored with some confidence; the place in question seems to be unknown, but must have been in the subject *Peraea*, presumably in the neighbourhood of Idyma.⁷⁴ The same may be said of Πατ[- -] in line 6: foreigners such as Πατ[αρεύς] cannot be admitted. There is nothing surprising

⁷³ Both features occur occasionally on subject territory, notably at Idyma; see *SEG* iv. 175 (= Robert, *Ét. anat.* 477, no. 4) and no. 11 below. Since the stone was actually unearthed at Gelibolu, it is hardly permissible to suppose that it has been brought there from elsewhere in modern

times.

⁷⁴ A place by the name of Κότα is recorded *SIG*³ 46, γῆν ἐν Κότοις), but it presumably lay, like the other recognizable places in that inscription, in the region of Halicarnassus.

in finding these unknown names: this part of the Peraea is full of obscure places whose names are recorded once and whose sites are quite uncertain: see *Peraea* 73-75.

There can, we think, be little doubt that our present fragment belongs to the same inscription as another, still more fragmentary, which was found at Idyma by Cousin and Diehl and published in *BCH* x (1886) 430, no. 6: cf. Van Gelder, *Gesch. der alten Rhodier* 443, Robert, op. cit. 474:

[- - - - -]ς καὶ Ἀφροδ[ίτης?]
[- - - - -]ς Μενεκράτου Πεδιε[ύς]
[καθ' ὑποθεσίαν]ν δὲ Φανομάχου Ἰωσσεύς

This stone was found 'à peu de distance de la mer', and so probably in the same general neighbourhood as ours. In the absence of a photograph it is hard to be sure of the degree of resemblance in the script,⁷⁵ but the similarity of content, arrangement, dialect, and length of line is striking. At least, we can have no hesitation in restoring in line 1: [Λητοῦ]ς καὶ Ἀφροδ[ίτης].⁷⁶ For Pedion and Lossos see Robert's discussion loc. cit.: there can now be no doubt that he is right in regarding them as small places in the region of Idyma.⁷⁷

L.g. Θυσσου. Carian names are rare on Rhodian territory.

The cult of Leto was popular in this corner of Asia Minor, particularly in Lycia, though it does not occur at Rhodes. In the Peraea it is attested especially at Physcus (*SGDI* 4266, cf. Strabo xiv. 652c), and also at Caunus (*JHS* lxxiii (1953) 32, no. 13). We know of no other instance of a joint cult of Leto and Aphrodite.

11. Gökova, at a spot called İnişdibi between Kozlukuyu and Akyaka, some 200 yards south-east of the medieval fortress; lying upside down outside house no. 92 (in 1957 the number of the house had been changed to 77, and the stone had been built into a wall beside the entrance from the road to the yard), a block of yellowish stone 0.50 m.

high, 1.34 m. wide, 0.45 m. thick: a small piece 0.17 m. square has been cut away at the top left corner. The upper surface seems to be plain Hellenistic letters, no doubt of the second century, 15-18 mm. high. The stone is said to have been dug up in 1953. Squeeze, PLATE 18 b.

vac. Ζήνων Ἀρτέμω[ν]ος . . ὙΝΕΙΤΑ - - -
Καλλίνικος καρποθηκείτας, Νικία[ς Μύ]νδιο[ς],
'Εκαταί(ο)ς Ἀλικαρνασεύς, Δημήτριος Μύνδιος,
Μυωνίδης Ἀλικαρνασεύς, Λυσίμαχος Λαοδικεύς,
5 Παπίας Βυσζάντιος, Ζηνᾶς ἐγγενής,
Ἀριστόμαχος ἐγγενής, Ἰάσων ἐγγενής,
Ἀντέρως ἐγ(γ)ενής, Ζώσιμος ἐγγενής,
Δημήτριος γραμματεὺς Ἰδυμίων,
Ἀπολλώνιος Ἀντιπάτρου Ἰδυμίου,
10 Εὐπορος Μύνδιος, Διονύσιος Ἐκάτωνος Καλλιπολεί[τας],
Νέων Ἀλικαρνασεύς, Λυσίμαχος Λαοδικεύς,
Νικάδας Ἀλαβανδεύς, εὐεργεσίας ἔνεκα
θεοῖς

The inscription is honorific, as is shown by the word θεοῖς at the end, but the honorand's name does not occur; it must have stood on some part of the monument above: cf. no. 12 below.

⁷⁵ So far as can be judged from the printed epigraphic text, which has the forms Α, Μ, Γ, Σ, Ω, there is at least no apparent discrepancy.

⁷⁶ The stone is described as 'base en pierre, brisée en haut'; if this means that the text is complete at the bottom, we must restore somewhat differently: [ἱερὺς Λητοῦ]ς καὶ Ἀφροδ[ίτης] - - - -]ς Μενεκράτου κτλ. It is then possible, though not necessary, that we have fragments of two separate lists of priests of Leto and Aphrodite.

⁷⁷ On line 2 Robert notes: 'on restitue Πεδιε[ύς]: il me semble qu'il faut Πεδιε[ως].' But Πεδιε[ύς] is right. The man in question has changed his place of residence upon adoption; in such a case both toponymics are given to the man himself, not to either of his two fathers: e.g. Blinkenberg, *Lindos* ii. 330 Ζήνωνα, Σατύρου Ἀμίου, καθ' ὑποθεσίαν δὲ Νικολάου Πεδιῆ, cf. *IG* xii. 1. 181, *Lindos* ii. 259, and Blinkenberg's remarks on p. 96. In line 2 Robert prints υἱοθεσίαν, but ὑποθεσίαν is the Rhodian form.

We considered reading in line 1 Ζήνωνα 'P...ω[ν]ος, particularly as the line is indented as if it were the first line of the inscription; but we can find no known or likely name consistent with the traces on the stone, which on the other hand exactly fit the name Ἀρτέμωνος. We take it then that we have an honorific dedication to a local landowner by six of his servants, the secretary of the *koinon* of Idyma, another Idymian, a man of Callipolis, another local man, and nine foreigners (or ten if the Laodicean Lysimachus in line 11 is different from the man of the same name in line 4). Among the foreigners Myndians are again prominent (see no. 6 above), and an equal number of Halicarnassians; the Byzantine Papias comes from farthest afield.⁷⁸ The foreigners are named without patronymic, according to the normal rule at Rhodes; the two local men, of Idyma and Callipolis, have patronymic and toponymic, also in accordance with normal practice.⁷⁹ The secretary Demetrius was no doubt of servile status and has no patronymic. ἔγγενεις are mentioned with some frequency in Rhodian inscriptions. 'Vocabulo ἔγγενής idem significari quod in inscriptionibus Delphicis est ἐνδογενής vel οἰκογενής Foucartus monuit. Vernae sunt', Hiller von Gaertringen, *IG* xii. 1. 483. καρποθηκείας is apparently ἄπαξ εἰρημένον. We take it to mean 'granary superintendent' or the like, that is, a trusted servant of the honorand. We considered the possibility that it might be a toponymic, but this is not, in our opinion, acceptable.⁸⁰

In line 1 Zeno has patronymic and toponymic, and is evidently a native of the subject Peraea, no doubt a local man; if he were a foreigner, he should have no patronymic, and if he were a native of Rhodes or the incorporated Peraea, he should be called 'Ρόδιος.⁸¹ The toponymic appears to be yet another unknown place; we are greatly tempted to read [Bo]υνείτα[ς], in contrast to the known toponymic Πεδιεύς (No. 10 above, commentary); but this is a conjecture only, lacking the support of any actual evidence.

From the forms [υ-]νείτα[ς] and καρποθηκείας in lines 1-2 it appears that the inscription is written in the Doric *koine*. On subject territory the Attic *koine* is normal, but exceptions occur; the published inscriptions of Idyma in fact show examples of both dialects: cf. Robert, *Ét. anat.* 474, no. 1 (Doric, of the time of Vespasian) and 489, no. 9. Our no. 10, which is not far removed in date from the present inscription, has Attic forms. The spelling Βυσζάντιος is of course familiar: see *IG* ii.² 8438 n.

The engraver has committed one or two errors, omitting the *omicron* of Ἐκαταῖος in line 3⁸² and the second *gamma* of ἔγγενής in line 7.

12. Inışdibi, at the same house no. 77, recently dug up, a rectangular base surmounted by a circular base-moulding,

0.22 m. high, 0.53 m. wide, 0.54 m. thick. Letters 19-21 mm. high, of the first century B.C. or A.D. PLATE 18 a.

καὶ ἀποσχομένου τῆς ἀπὸ
τῶν κτηνῶν παροχῆς,
εὐνοίας ἔνεκεν τῆς εἰς αὐτὸν
θεοῖς

The block is complete, so that the inscription must have begun on the round altar that stood above.

⁷⁸ Λαοδικεύς is most naturally taken to relate to Laodicea on the Lycus, but this is not of course certain.

⁷⁹ Natives of all parts of the Peraea are regularly described in this way; no indication is therefore afforded as to whether a particular place lay in incorporated or in subject territory, except that on subject territory Rhodian demesmen have the ethnic 'Ρόδιος in place of their demotic. Idyma itself was certainly subject: see *Peraea* 71.

⁸⁰ A small locality by the name of Carpotheca would be

perfectly possible if it lay in the vicinity of Idyma, but in this case Callinicus should have a patronymic; having none, he would necessarily be a foreigner, and a *city* by the name of Carpotheca is hardly conceivable.

⁸¹ See n. 79 above and *Peraea* 53.

⁸² There can hardly be any question at this date of a deliberate omission; forms such as Ἐρμαῖς, Γάις, &c., are common in the Imperial period, but not in the second century B.C.

παροχή, πάροχος, παρέχειν are regularly used of the compulsory supply of necessities, free of charge, to travelling officials, especially but not always Roman officials; they became indeed technical in this sense.⁸³ We presume that this is the meaning here: the inscription is in honour of a Rhodian governor who, among other good deeds, forwent the free supply of animals (that is, no doubt, baggage animals) to which he was entitled. The inscription is of the same type as no. 9 above: e.g. [ὁ δείνα⁸⁴ ὑπὲρ τοῦ δείνος στρατηγήσαντος ἐπὶ τὸ πέραν - - -] καὶ ἀποσχομένου κτλ. The use of ἀπὸ τῶν κτηνῶν in place of the simple objective genitive is perhaps to be explained by the technical meaning of παροχή, i.e. not 'the supply of', but 'his entitlement.'

CALLIPOLIS IN CARIA

The location of Callipolis is an enigma. The *testimonia* are as follows:

(a) Arrian, *Anab.* ii. 5. 7, where after Alexander had passed on from Halicarnassus in 334 B.C., Orontobates (the successor of the Hecatomnids) is spoken of as holding Myndus, Caunus, Thera, and Callipolis and winning over Cos and Triopion.

(b) Delphic *Thearodokoi* list, *BCH* xlv. 6, where Callipolis is mentioned in the sequence Cnidus-Caunus-Calyndus-Callipolis-Theangela—Mylasa. c. 200 B.C.

(c) Statue base at Cedrae, *Peraea* 45 f., no. 42, in honour of a demesman who is said to have been crowned also by — and the Kallipolitai and the Tripolitai. Dated by Maiuri to the second century B.C.

(d) Dedication at Idyma, above p. 79 no. 11, in which a Callipolitan joins in honouring an Idymian proprietor.

(e) Altar from Duran Çiftlik, Hula and Szanto, *Bericht über eine Reise in Karien* (*SB Wiener Akad.* 132) 34:

[Δομ]τίαν θεᾶν Σεβαστᾶν
[ὁ δᾶ]μος Καλλιπολιτᾶν
θεοῖς.

(f) Stephanus Byzantius cites a Callipolis in Caria.

(g) Καλλιπολιται appear in a rubric in the Athenian tribute lists of the sixth and seventh periods; but there is no likelihood that the reference is to the Carian Callipolis (cf. *ATL* i. 494).

(h) Hellenistic coins have been attributed to the Carian Callipolis, in fact without good reason (see Robert, *Ét. anat.* 491 f.).

The Turkish *muhtarlık* of Gelibolu (Gallipoli), which lies on the south side of the Gulf of Gökova, has been regarded as preserving the name of the ancient Callipolis, and was long believed to be the situation of the ancient city of that name. In 1893, however, Hula and Szanto discovered the altar dedicated to Domitia, (e) above, at a site at Duran Çiftlik, where they also had information of the discovery of tombs and coins. Duran Çiftlik lies some 9 kilometres from the gulf (and considerably farther from Gelibolu), and Hula and Szanto concluded that the ancient Callipolis must have been situated inland in the vicinity of Duran Çiftlik, though they were prepared to admit the possibility that the city could have had a port on the gulf. In 1934 L. Robert visited Duran Çiftlik and Gelibolu. At the former he noticed no trace of an ancient city, and he discounted the talk of tombs and coins found there; he therefore concluded that Hula and Szanto had been wrong 'de s'en tenir à ces vagues hypothèses' and that 'une étude

⁸³ See *RE* s.v. Parochos, and for a more general use about the date of our inscription, *IG* xiv. 951 (1st c. B.C.).

⁸⁴ αὐτόν, masculine, shows that the dedication is a private

one, not by the koinon of Idyma. Ἰδυμίων ὁ δῆμος would be abnormal at this date. The dedicator had no doubt benefited personally by the governor's generosity.

plus approfondie permet d'écarter la localisation recommandée'.⁸⁵ The Domitia dedication must, he considered, be a *pièce errante*, and could therefore not be used as evidence for the position of Callipolis. At Gelibolu, on the other hand, Robert was deeply impressed by the existing remains of ancient and medieval forts. His visit was brief, and his investigations were impeded by the dense scrub; but he nevertheless did not hesitate to conclude that 'il est assuré que la baie, bien abritée, avec sa vallée fertile, a été habitée, et qu'elle contient les restes de Kallipolis. Mais je ne saurais fixer à un point précis le site de la ville'. Robert's case is skilfully argued; it has been accepted in *ATL* i. 508, and in *Peraea* 46, 71 before we had explored Gelibolu: but subsequent investigations and discoveries have not tended to confirm it, and the problem calls for a closer examination.

To take Gelibolu first: there are certainly forts on the hills overlooking the little plain; but none of them can be described as an ancient settlement site, and the plain does not contain remains of the sort that usually betoken an ancient city. Paton observed that he found nothing there that spoke of a past.⁸⁶ Robert's own description adds nothing that is substantial. He quotes *in extenso* Guidi's description of the fortifications of Kızıl (Qözil), 'Gheli-Bol' (medieval), and Göz-Bel (see above, p. 65). He observes that he himself noticed 'des restes assez importants de monuments de basse époque' near the foot of Kızıl, and as he was leaving the site saw 'les restes, en bel appareil, dominant la végétation, qui doivent être les ruines marquées sur la carte marine' well up the valley on the left bank of the stream; these last he was unable to visit. The reader is left with the impression that the wall 'en bel appareil' on the left bank may be the missing city-site. For a long time we were unable to imagine where this handsome wall could be; it was only on a later visit in 1956 that the mystery was solved. The wall in question is evidently no other than that of the medieval site above the *muhtar*'s house (above, p. 65, no. 4); seen from the east by the main road this presents just the appearance described, and when seen from far enough away its quality looks deceptively good. This site may clearly be left out of the reckoning; and it seems in fact that there is no town site at Gelibolu. We have described above all the remains which we have seen; the sole remaining possibility is the fortification of Kızıl, which would appear to be distinct from the fort of Kapılı Kızılı. As explained above, the dense scrub at present makes it impossible to find out anything about this site; but Guidi's description is hardly suggestive of an acropolis. He calls it a *fortezza*, and speaks of terrace walls, a great mass of ruins on the summit, and a massive polygonal wall on the side towards the saddle on the north-east; this last is 'concavo verso l'esterno', and does not sound like a ring-wall. Guidi's description, taken in conjunction with Robert's silence about what he saw there and the fact that the inhabitants of Gelibolu do not know of ancient remains on the spot, seem to us to indicate decisively that there was never a city in this position. This absence of any discoverable city must inspire serious doubts concerning the location of Callipolis here; for Callipolis was sufficiently strong to be one of the Hecatomnid garrison points and sufficiently notable to be visited by the Delphic *theoroi*, and the city therefore cannot be located where there is nothing approximating to a city-site.

The location of Callipolis at Gelibolu would create even more serious geographical difficulties. It is clear that Callipolis was never a deme of the incorporated Rhodian Peraea:⁸⁷ but

⁸⁵ Op. cit. 494, in his chapter (ibid. 491-502) on the subject of Callipolis.

⁸⁶ *JHS* xi. 109f.

⁸⁷ See *Peraea* 71. In the unusually abundant inscriptions of Rhodes and its incorporated Peraea and islands not a single Callipolitan is ever mentioned (the ethnic was read in *IG* xii. 3. 48 (Telos), but is corrected by Hiller, ibid. p. 276). This is normal if Callipolis was on subject territory

(in the three main collections of Rhodian inscriptions there is a single mention of a Pladasan (*IG* xii. 1. 962, from Chalke), but Idymians, Therans, Pisyetes, and others are totally absent); but it would be extraordinary if Callipolis was a Rhodian deme. The visit of the Delphic *theoroi* also suggests that Callipolis was not incorporated in the Rhodian state.

Gelibolu was almost certainly incorporated, for the following reasons. Cedreae, about an hour to the west of Gelibolu, is abundantly attested as a Rhodian deme, and other such demes are now proved at Söğüt and Altınsivrisi. Geographically Gelibolu belongs naturally with this region; it secures the crossing of the peninsula at its north end, as Physcus does the south. The route from Physcus to Cedreae inevitably leads by Gelibolu, and it is not easy to imagine that the Rhodians could have acquired Cedreae without it. But if Callipolis was at Gelibolu, the boundary of the incorporated Peraea must be placed between it and Cedreae. Such a boundary was accepted in *Peraea* 71, as being a necessary consequence of Robert's location of Callipolis; but it was never really satisfactory, and must now, we think, be abandoned. In particular, a Hecatomnid strongpoint under Orontobates at Gelibolu is hard to accept if Cedreae was at that time Rhodian.

There remains the possibility that the site of Callipolis is Çetibeli Asarı (p. 66). This is in some ways not unattractive; and the name Callipolis could easily have been transferred from there to Gelibolu if the occupants of the Çetibeli site had the occupation of the land at Gelibolu. But Çetibeli Asarı has the appearance of a deme site rather than of a Carian city; and since (in our view) Gelibolu must have been included in the incorporated Peraea, it seems very unlikely that the Çetibeli site could have had the possession of Gelibolu without itself being a Rhodian deme. Ferek cannot come into consideration as a site for Callipolis; and we cannot therefore see how Callipolis can have been anywhere in the vicinity of Gelibolu.

Archaeologically, the apparent strength of Robert's case rested in his demonstration that the Domitia dedication found at Duran Çiftlik must be a *pierre errante*. But unfortunately this is where his contention in fact proves to be weakest. The site at Duran Çiftlik is unquestionably ancient, and almost certainly a sanctuary site (see above, p. 81); it was therefore an entirely appropriate position for a dedication in honour of Domitia, and there is no ground for supposing that the stone was not at home here. Robert's argument, that there was no ancient city at Duran Çiftlik, is altogether misconceived; he of course knew nothing of the site at Asar close above Duran Çiftlik on the north-east, nor of those at Elmalı and Hisarlık, and he argues as if a dedication of the people of Callipolis could only be set up within the city walls. Now that it is established that Duran Çiftlik is a sanctuary site, the natural assumption is that it lay within the territory of Callipolis; and a site for the city itself can be found close at hand.

A situation in the vicinity of Duran Çiftlik fits admirably with the *testimonia* for the ancient Callipolis (above, p. 81). Lying as it does on the easy overland route from the Caunian lake to the Ceramic Gulf, it would naturally enter into the itinerary of the Delphic *theoroi*. It seems well situated for contacts with the communities in association with which Callipolis is named in inscriptions.⁸⁸ And it makes excellent sense of the political situation in Caria in 334 B.C., when the Rhodians (with Physcus as their base) appear to have held the Chersonese south of the Idyma plain, while the successor of the Hecatomnids was occupying a chain of garrison points confronting them along the line of the Kıran Dağ and the sleeve leading to Caunus. Robert declared Hula and Szanto's location of Callipolis to be ridiculous in view of the maritime role attested for Callipolis as one of Orontobates' strongholds (together with Myndus, Caunus, and Thera); but Thera was not on the coast, and the estimate of the maritime role of Callipolis must await the discovery of supporting evidence.⁸⁹

That the name Gelibolu represents the Greek Καλλιπόλις is almost certain. The Admiralty chart no. 1604 of the year 1839 marks the bay under the name 'Port Gallipoli', and already

⁸⁸ Idyma, Cedreae, and the Tripolitai (who presumably also lay outside the confines of the incorporated Peraea).

⁸⁹ The situation of Thera on the plateau (*Peraea* 47 f.) was

of course not known when Robert wrote. Theangela is not named among Orontobates' positions; presumably it had been won over by Alexander.

before this date a place called Gallipoli was known to cartographers on the south side of the Gulf of Cos.⁹⁰ The earliest evidence of this known to us is in the map in Choiseul Gouffier's *Voyage pittoresque* (Paris, 1782) pl. 73. The occurrence of the name here is therefore older than the era of modern antiquarian zeal in Greek cartography and can hardly have been introduced as a result of learned speculation. On the other hand, there appears to be no mention of a Callipolis in this part of Asia Minor in any Byzantine or medieval source, or in the portolans and Italian charts; and if the name were in fact a survival from antiquity, this absence of any intermediate mention would be unique (or almost so) among the settlements of the coast between the Propontis and Caunus.⁹¹ We are in consequence divided in our opinion whether the name represents a genuine survival; if it does, we should suppose that the name may have been carried to the coast at a time when Greeks of the towns in the interior were preparing fortresses on the coast, in which they could take refuge when their land was overrun by the Turks.⁹²

Situated inland from the plain of Idyma, the ancient Callipolis cannot by origin have been a Greek city. It does not seem to have been named by Hecataeus in his geography or entered in the Athenian tribute lists; and its first appearance in history is as a Hecatomnid garrison position. If the name Callipolis was not current here in classical times, the probability is that it was introduced by the Hecatomnids in accordance with their hellenizing policy; and in that case the territory of the Carian Callipolis is likely to have been known by another name in classical times.⁹³ Now, when the Rhodian general Nicagoras c. 200 B.C. set to work to reconquer the Rhodian subject territory that had been lost during the campaigns of Philip V, he recovered τὰ[ν] Πισυῆτιν χώραν καὶ τὰ[ν] Ἰδυμῖαν καὶ τὰν Κυλλανδίαν[ν κ]αὶ τὰ ἐν αὐτοῖς φρούρια.⁹⁴ The Ἰδυμία is of course the land at the head of the gulf. The Πισυῆτις is the highland north of the Kıran Dağ, including presumably Thera. H. Kiepert and Philippson tentatively placed Cyllandus at Yenice on the plateau north of Idyma, and R. Kiepert at Sarnıç. But these locations on the maps are unsupported conjectures.⁹⁵ The one significant clue is that the Κυλλάνδιοι, who appear in the tribute lists of the first and second periods, pay the unusually large sum of two talents. It does not seem possible that the Athenians could have exacted two talents from a community on the high plateau north of the Idyma plain. In fact, since the tribute of the Κυλλάνδιοι was considerably greater even than that of the fertile plain of Idyma, there seems to be little choice save to place them in the extensive fertile land to the east of the Idymian plain.⁹⁶ Cyllandus was an old settlement, since it is cited by Stephanus Byzantius from Hecataeus, and the ethnic occurs (as we have noted) in the tribute lists; but after this, apart from the one reference to the Κυλλανδία as a territory c. 200 B.C., the name is defunct in our sources. This is surprising, considering the evident prosperity of this people in the fifth century B.C. Since both the Κυλλάνδιοι and the Καλλιπολιῖται seem to have been

⁹⁰ Cf. Cramer, *Asia Minor* (1832) ii. 216. Newton, however, gives the name (of the stream) as Gheli Bourla (*Halicarnassus* ii. 625).

⁹¹ The one established parallel that presents itself is Erine (Rena, Arine, now Hisarönü) at the head of the Gulf of Syme. But this identification, though attractive, is likewise uncertain. The name Rina is not rare (e.g. on Kalymnos and Leros), and on Kalymnos at least it is derived from the name H. Eirene; at Hisarönü it may have the same origin.

⁹² Thus the Greeks of Menemen, Nymphi, and Magnesia (under Sipylus) built themselves a fortress at Old Phocaea about the beginning of the fourteenth century (Tomaschek, *Zur hist. Topographie v. Kleinasien im Mittelalter* 26).

⁹³ Cf. *ATL* i. 508, where (in connexion with the presumed situation at Gelibolu) it is suggested that Callipolis is a 'Hellenistic euphemism for Kyllandos'.

⁹⁴ *IG* xii. i. 1036; *Peraea* 99 q.v.

⁹⁵ See *Peraea* 72 f., 76. *ATL*'s location near Gelibolu (above, n. 93) is bound up with the false location of Callipolis there.

⁹⁶ The order in which the three territories recovered by Nicagoras are cited can hardly be that in which they were reconquered. But if (as we suppose) the Cyllandia bordered the Idymia on the east, the order can fairly be called a geographical one; whereas there would be no order at all if the Cyllandia were also on the plateau north of Idyma.

situated in the fertile land east of Idyma, it is most natural to assume that the two names (as *ATL* conjectured) applied to one people; that in the fourth century B.C. Cyllandus was renamed Callipolis—a change not unlike that of Syangela to Theangela—and that in the course of Hellenistic times the ethnic Καλλιπολείτας superseded the old ethnic Κυλλάνδιος, though as late as the beginning of the second century B.C. the territory was still spoken of by the Rhodians as the Κυλλανδία.

Of the three sites which we have examined in this territory (above, pp. 73 ff.), that of Hisarlık near Karabörtlen is the most distant from Duran Çiftlik, and it hardly seems large enough to have been an independent city controlling this region. The site at Elmalı is large and impressive; it alone shows signs of occupation in the fifth century or earlier, and on the other hand there is no indication that it was flourishing as a city in Roman times. It seems to us a most suitable site for Cyllandus. As at Idyma, there are handsome architectural tombs of classical date in the vicinity of the site, so that we should expect to find that a dynasty was established here. At Asar Roman pottery is abundant, and the site is a considerable one directly overlooking the sanctuary at Duran Çiftlik, where the dedication to Domitia was found. There seems to us no doubt that the city of the Καλλιπολίται, at the time when they set up this dedication, was that at Asar. The situation is a commanding one, dominating both valleys, such as might well commend itself to the Hecatomnids. If we are right in believing that Callipolis was the successor of Cyllandus, it is tempting to suggest that (as at Syangela–Theangela) the change of name and the change of site occurred together as part of the Hecatomnid reforms; but without a protracted and thorough investigation of both sites such a suggestion cannot have more than the force of a conjecture.

THE CNIDIA

See *BSA* xlvii. 171–212.

The main conclusion reached in our article, concerning the position of classical Cnidus at Burgaz near Datça, has been well received, and may now, it seems, be regarded as established. Further evidence in its favour is afforded by G. Klaffenbach's interpretation of our inscription, *ibid.* no. 3, p. 187, which we had not understood.⁹⁷ Klaffenbach restores: [Χα]λκεῖται Κ[νιδίων εὐερ]γέται. ἔδωκ[αν Κνίδιοι] Χαλκεῖταις ἔσ[πλον καὶ] ἔκπλον κτλ. This is surely right, and the inscription is a genuine Cnidian document, adding one more to the list of early texts from Burgaz, and actually found by us on the ancient site; the inscription must then be older than the removal of the city to Tekir. In *BSA* xlvii. 210 ff. we were undecided as between a date about 330 B.C. and one a generation or so earlier for this removal. If our view of *BMI* 796 is right, it may perhaps turn the scale in favour of the later date. This is the epigram which begins ἐπὶ νεοπολιτῶν προστατῶν ἀφικόμεν, followed by the names of fifteen *prostatai*. We took νεοπολιτῶν to mean 'of the new city', and understood the inscription to be dated by the *prostatai* of the first year after the move; the fifteen names must comprise five each from the old city, the new city, and Triopion. J. and L. Robert⁹⁸ agree that νεοπολιτῶν refers to the new city, but prefer to write Νεοπολιτῶν, supposing that the new city was actually named Neopolis, and took its turn in furnishing the board of *prostatai*. The inscription may then belong to any year, or part of a year, in which they were furnished by the new city, and is of less value for dating purposes. The fatal objection to this, as it seems to us, is the inordinately high number of the *prostatai* (fifteen instead of the normal five, and all evidently Νεοπολίται), for which on the Roberts' view there is no necessity or apparent justification. We therefore adhere to our

⁹⁷ *Festschrift für Carl Weickert* (1955) 94–96. J. and L. Robert, *REG* lxxix (1956) 163, refer to the 'cadre du stoichedon', but

this inscription is not written stoichedon.

⁹⁸ J. and L. Robert, *REG* lxxvii (1954) 169; cf. lxxviii. 247.

own explanation;⁹⁹ and since the inscription appears to us to be distinctly later than the middle of the fourth century, we are now inclined to prefer the later date for the move to Tekir.

In connexion with our location of Triopion at Kumyer,¹⁰⁰ interesting new information has been sent to us by Dr. Wilder Penfield, of the Montreal Neurological Institute, who visited the Cnidia in April 1956. On entering the bay of Palamutbükü, and knowing that we had located the harbour of Triopion there, it seemed to him that the bay was unduly exposed for the purpose, and he enquired of the local coastguardsman concerning the existence of any harbour-works. He was then informed that there is in fact a wall on the bed of the ocean leading from the southern point of Baba Ada to the nearest point of the mainland. The coastguard averred that he had actually seen this wall through his 'schnorkel' apparatus, and often got his fishing-line caught when he passed over it. Dr. Penfield proceeded in a boat to the place indicated, and found that he could see bottom for two or three hundred yards out from the island towards the mainland and vice versa; he noticed also a distinct riff or ripple in the surface of the water above the line of the alleged wall, such as might be caused by the upward thrust of water meeting with a submerged obstacle.¹⁰¹ Short of first-hand observation by divers, this evidence seems as firm as could be expected. It is certainly surprising. The distance from island to mainland at this point is over a kilometre, and Admiralty Chart 1604 shows depths varying from 20 to 40 fathoms; a sea-wall here must therefore have been a gigantic work, far exceeding in scale the similar wall at Samos, which Herodotus describes as the greatest of its kind built by Greeks.¹⁰² It is also remarkable that the Admiralty survey (in 1839) should have failed so completely to reveal the existence of the huge mass of rubble that must still presumably be rising from the ocean-bed. But if this great sea-wall does in fact exist,¹⁰³ it is conclusive in favour of our location of Triopion. The resulting anchorage would be of first-rate quality,¹⁰⁴ commodious and sheltered on every side; for the harbour required by the texts of Thucydides viii. 35 and Plutarch *Cimon* 12¹⁰⁵ we need obviously look no farther.

It had appeared to us that confirmation of the location of Triopian Apollo at Kumyer might perhaps be afforded by the inscription no. 28 found by us there and relating to the temenos of Asclepius.¹⁰⁶ The text is: τέμενος Ἀσκληπιοῦ | ἀποτελεῖν μίσθωμα | κατ' αἰ κομιδᾶς | ἐκ ποθόδου θυσιᾶν, which we understood to mean, 'the sanctuary of Asclepius shall pay rent out of the revenue from the sacrifices, in proportion to the receipts from time to time'. J. and L. Robert¹⁰⁷ characterize this explanation as 'strange', and offer another which they presumably consider less so. They observe first that τέμενος cannot be an organism which has to make payments, and prefer to regard the first line as a heading. This criticism appears to us just, and we accept it readily, the more so as it hardly affects the general interpretation. The Roberts

⁹⁹ The phrase ἐπὶ νεοπολιτῶν προστατῶν is on either view unsatisfactory to the modern historian as a dating formula; not so, however (if we are right), from the point of view of its own time; in the first year of the new city ἐπὶ νεοπολιτῶν προστατῶν is in fact a precise date, and might well be acceptable in a verse inscription. The new foundation was of course the great event that filled every man's mind.

¹⁰⁰ Op. cit. 208-10 and map, pl. 37.

¹⁰¹ This ripple is clearly visible in a photograph he sent us. Since we wrote this paragraph Dr. Penfield's account of his discoveries has appeared in *Proc. Amer. Philosoph. Soc.* 101, no. 5, Oct. 1957, 393 ff. He discusses the situation of Triopion at Kumyer and the harbour mole connecting the island to the mainland (with photographs and sketch-plans of Datça-Burgaz and Kumyer-Palamut Bay; for the snake of his fig. 4 cf. *BSA* xlvii. 183 (large funerary altar =

Penfield's n. 12), Keil-Premmerstein, *Zweite Reise in Lydien*, no. 17, Laumonier, *BCH* lviii. (344). Penfield notes that at the foot of the Kumyerkalesi hill towards Kumyer village there is a 'remarkably level field', and that the stadium of the Triopian sanctuary may have been there.

¹⁰² Hdt. iii. 60: χώμα ἐν θαλάσσει, βάθος καὶ εἰκοσι ὀργυῖων, μήκος δὲ τοῦ χώματος μέζον δύο σταδίων.

¹⁰³ A mole with an open passage in the middle, consisting in fact of two walls projecting from the mainland and the island, would fit Mr. Penfield's observations better.

¹⁰⁴ Even without a wall, an anchorage is shown on the chart near the north end of the island, in depths varying from 9 to 20 fathoms.

¹⁰⁵ *BSA* xlvii. 209.

¹⁰⁶ *BSA* xlvii. 194, 209.

¹⁰⁷ *REG* lxvii. 165 f.

then divide the remainder into two sentences, and explain: ‘ “verser (à savoir ceux qui exploitent le téménos) un loyer perpétuellement; que les recouvrements (soient pris) sur le revenu des sacrifices.” Il y aurait eu une transaction entre un propriétaire et le sanctuaire d’Asclépios (situé ailleurs plutôt qu’ici): le temple a pris en location pour toujours et paie un loyer perpétuel; l’argent est pris sur le produit des sacrifices.’ If we understand this rightly (of which we are by no means sure), the temenos is a piece of land belonging to a private individual but rented in perpetuity, for some purpose unstated,¹⁰⁸ by the temple of Asclepius; the money for the rent is to come out of the profits of the sacrifices conducted at the temple. ‘Those who exploit the temenos’ are then the temple officials, though they play the part, not of landlord as usual, but of tenant.¹⁰⁹ We doubt very much whether this can be right. To say nothing of the telegraphic brevity of the final sentence, we should welcome some evidence that any Greek ever said κατ’ αἰῶν meaning ‘for ever’. But the most serious objection, in our opinion, is the futility of the document so understood. This is a business agreement, a form of contract, concerning the payment of rent; yet nothing whatever is said of the amount of the rent, although it is to be paid for ever; it is merely laid down that the lessees shall get their money back from the sacrifices. What could be more pointless? Who cares where the money comes from? The temple officials could, if they chose, make this rent a charge on the proceeds from the sacrifices, but it is ludicrous to make this a clause in the contract. The only reasonable cause to mention the proceeds of the sacrifices is, surely, to define the amount of the rent. On our view of the document it only does this imperfectly, and we are far from insisting that our interpretation is right; but ‘strange’ as it may be, it is not, we think, displaced by the alternative discussed above. In any case, our main point is unaffected: the sanctuary of Asclepius, even if it was not (as we imagine it to have been) at Kumyer itself, cannot have been far away. The prime requisite for a cult of Asclepius is water, which is not to be found outside this central valley at any point nearer than Datça.¹¹⁰

THE HALICARNASSUS PENINSULA

MYNDUS

With reference to the expression ἐν πόλει Μέντζα, quoted as the source of inscription no. 40 in *BSA* l. 112, we note that Myndus seems formerly to have been called by the name Menteşe (K. Miller, *Die Peutingersche Tafel* (1916) p. 11, ‘Mendesche (Mindo)’). The Menteşe family of Derebeys once possessed most of what is now the Vilayet of Muğla. The *epsilon* in the name Myndus is found in *Not. Ep.* (bishop ὁ Μένδου) and in Sanuto’s form ‘Jumenta’.¹¹¹ For κεφαλε- in the inscription no. 38 we would compare (at Aphrodisias) σὺν ταῖς σπείραις καὶ κεφαλεῖσιν.¹¹²

¹⁰⁸ Perhaps in order to let it out to others, as was commonly done with temple land, though in this case it would be more natural to buy the land outright.

¹⁰⁹ The Roberts find a parallel for the present text in the well-known inscriptions from Smyrna, *SIG* 990. These are not easily intelligible in all parts, but it is clear that the money passes from the temenos to the temple; how this can be parallel to the present case we do not see, and wonder if we can have taken our critics’ meaning correctly.

¹¹⁰ A number of the Roberts’ other criticisms of the epigraphical part of our article hardly seem to justify the denigratory remarks with which they are prefaced. On no. 2, for example, they have misunderstood our note concerning the date of Iphiadas’ proxeny, which marks a point not in the history of the proxeny, but in the career of Iphiadas. For no. 58 their suggestion [Κουρ]οτρόφου neglects our observation that about half the name is preserved.

Our translation (p. 208, n. 20) of the epigram *BMI* 797 is said to contain nothing new; yet we note that in Robert’s own *Ét. épigr. et phil.* 44, to which he refers us, the text is still printed in the old erroneous form, with ἐστέιχεις in line 4, where εἰ στείχεις is obviously required. On the single-line epitaph no. 12, μῆμα Ἐπιταδεῖο θυγατρὸς τόδε παιδε[ς] ἔθηκ[αν], we noted that the inscription, brief though it is, appears complete. The Roberts observe, ‘certainement, car elle forme un hexamètre’. Did they suppose we had not noticed this? Why must the text be complete because it forms a verse? What was to prevent the addition of a second or more verses, supplying a little more information? Are we alone in feeling that criticism of this kind is rather tiresome?

¹¹¹ Tomaschek, *Zur hist. Topographie v. Kleinasien im Mittelalter* 38 (also as a *v.l.* in manuscripts of the Byzantine historians).

¹¹² *REG* lxi. 194.

ÇİFITKALESİ (ASPAT)

Like Robert, we remarked (in *BSA* l. 129 n. 184) that the castle on this conical hill may be the medieval Strobilos; and we have now found evidence that the hill was actually so called in recent times.¹¹³ In the meantime we have examined the *testimonia* accessible to us, and feel some doubt whether all the references to Strobilos assembled by Tomaschek can be to one single place. It is difficult to believe that this Strobilos can have lain anywhere near St. Willibald's route overland in the eighth century, and the phrase 'transito urbis Strabolis monte excelso' does not fit with this position. Similarly, the Strobilos where the admiral Damian fell ill and died in A.D. 915 was not on the mainland: εἰς Στρόβηλον νῆσον, Theoph. Contin. vi, p. 240 (p. 388 Bonn). It is therefore questionable whether Robert is justified in continuing to revile Grégoire for assigning the early Christian inscriptions of Çifitkalesi to Termera¹¹⁴—the more so since the site of Termera is fixed with certainty at Asarlık close above Aspat and Strabo refers to a χωρίον Τέρμερον as existing in his own day (xiv. 657). The name Strobilos may have been first applied here at a later date when the medieval fortress was built.

TELMESSUS

When we drew attention to the apparent insignificance of the oracle of Apollo at Telmessus¹¹⁵ we were not aware of a recent article in which Daux shows reason for doubting whether the response known from the British Museum inscription was given by Telmessian Apollo and argues convincingly that there was no oracle at Telmessus.¹¹⁶

TORBA

We give a photograph (PLATE 20 *b*, taken in 1945) of the mausoleum on the shore of Torba bay about ten minutes east of the landing-stage.¹¹⁷ The building was marble-faced; it has a shallow forecourt and a main chamber with an apse at the east end; the floor was paved in black, white, and red mosaic.

A bit of the fortification on the adjacent Konel Ada is illustrated on PLATE 20 *a*.¹¹⁸

HALICARNASSUS

The altar dedicated to Aphrodite, to whose forthcoming publication we referred in *BSA* l. 104, is now published by L. Robert,¹¹⁹ together with a mention of four inscriptions of the gymnasium (our nos. 8–11),¹²⁰ and of a relief with a crater and shield.¹²¹

KIZILAĞAÇ VALLEY

In September 1955 we visited the group of buildings in the Kızılağaç valley east of Halicarnassus, discovered by Judeich and Winter.¹²² The round building (PLATE 20 *f*) is of the

¹¹³ Plieninger, *Pet. Mitt.* 1920, 162, mentions 'den von Kos aus wie ein Vulkanberg erscheinenden, mit einem schönen alten Kastell gekrönten Andesitgipfel Ewraökastro oder Strobilos (oder, wie ihn die englische Seekarte nennt, Chifut Kalessi)'. The Turkish portolan of Piri-reis of the year 1521, also seems to place Strobilos at Aspat (according to Wittek, *Das Fürstentum Mentesche* 172).

¹¹⁴ See most recently *Hellenica* x. 232, n. 1 ('cette ville (sc. Termera), dont le site n'est pas connu, a disparu dès le début de l'époque hellénistique').

¹¹⁵ *BSA* l. 151 ff.

¹¹⁶ *Rev. phil.* xv (1941) 11 ff.

¹¹⁷ Cf. *BSA* l. 131, n. 201, map p. 86, fig. 1.

¹¹⁸ See *BSA* l. 131, 159.

¹¹⁹ 'Deux Inscriptions de Carie', *Mél. Isid. Lévy* (1955) 569 ff.

¹²⁰ *BSA* l. 100 f. We note that our Melanthios of no. 8 may perhaps be restored in *Ann.* iv–v. 468, no. 8; for the name Μύτων in no. 10 Robert refers to his *Hellenica* vii. 221, n. 4. For the inscriptions mentioned under no. 11, see Wilhelm, *ÖJh* viii. 238 ff.

For our inscriptions nos. 33 (*a*), 34 cf. Grégoire, *Recueil* nos. 235–6.

¹²¹ Evidently one of the pair unearthed by Newton and now built into a house (*BSA* l. 92, n. 41, pl. 13(*d*)); for the snake and kantharos in hero reliefs see now M. Andronikos, 'Λακωνικά 'Ανάγλυφα', *Πελοποννησιακά* i (1956) 303–5.

¹²² *AM* xii. 224, figs. 1–2; cf. *BSA* l. 134.

'compound tumulus' type, similar in size and in plan to the neighbouring 'tomb of Lygdamis',¹²³ with the usual two eccentric ring-walls. Of the radial walls joining these where they diverge two are visible, and a third is probably concealed under the debris. The centre is, as usual, almost free of fallen blocks. The most remarkable feature is the entrance, which is on the north. On the outer side the door is 1.15 m. high and 0.73 m. wide, but on the inner side (still within the thickness of the ring-wall) it is partially blocked up, leaving an entrance only 0.40 m. high and 0.35 m. wide. This inner part shows no obvious signs of being an addition, and the whole arrangement appears to be original. The other buildings are plain rectangular structures with walls up to 0.95 m. thick. This site, close to the foot of the hills on the east side of the valley, is certainly not a Lelegian town-site, to which it bears no resemblance. We are inclined to see in it a group of farm-buildings; the very small entrance to the round building, and its association with rectangular chambers that are clearly not tombs, support the theory we advanced in *BSA* l. 167 that these 'compound tumuli' are in reality sheep- or goat-pens.¹²⁴

Across the valley from this site, a little to the north, is a hill with two summits, each of which carries a Lelegian fort. That on the southern summit is 40–50 metres in diameter; the wall (PLATE 20 *e*) is best preserved on the south side. In the interior are remains of buildings, much overgrown. That on the northern summit is similar, but smaller and less well preserved. On the saddle between is a small cistern constructed of small uncut blocks. This again is not a town-site.

THE ANGELA¹²⁵

In September 1955 Bean and Miss A. Akarca spent a week at Etrim. This enabled a plan of the city to be drawn (FIG. 6) and the site as a whole to be more thoroughly examined than had previously been done. No regular excavation was attempted, but soundings were made at selected spots.¹²⁶

The style of masonry in the city wall is not uniform throughout. The most characteristic is that shown in PLATE 21 *a*, with long narrow blocks, a style reminiscent of the Lelegian town-sites. But at E, where the wall is still standing to a height of 5–6 metres, the lower part is of large irregular blocks, the upper part of much smaller blocks in more or less regular courses (PLATE 21 *b*). This is also paralleled on the Lelegian sites, notably in a building at Alâzeytin shown for comparison in PLATE 20 *c*. Its thickness is in most parts from 2.35 to 2.50 m., but in places on the north side it is little more than 2 metres. Between D and C, where the slope of the hill is comparatively gentle, the wall is furnished with rectangular towers at frequent intervals; on the steep north side towers are few but the wall shows a succession of jogs.

The main entrance to the city is on the south side towards the west end. The gate is 2.80 m. wide and is flanked by a tower on either side. Inside the gate a wall projects at right angles from the inner corner of each tower, and there was no doubt originally an interior courtyard; but this has been destroyed and overlaid by a late reconstruction in masonry of very poor quality, and the plan can no longer be recovered. In the northern of these two interior walls is a recess 1.22 m. high, 1.20 m. wide, and 0.40 m. deep, about half a metre above ground-level; hardly a guard's post. From this gate the line of an ancient road is clearly discernible running towards

¹²³ *BSA* l. 132 and fig. 12.

¹²⁴ Judeich and Winter were disposed to believe that the building, originally a tomb, was at a later time used as a *mandra*, the size of the entrance being reduced for the purpose. We prefer to think that this was the original purpose.

¹²⁵ This section should be read in connexion with *BSA* l. 112–15, 145–7.

¹²⁶ The outline of the city wall was entirely traced with compass and tape, and may be regarded as accurate within a very small margin of error; the positions of the individual buildings in the interior were for the most part estimated, without actual measurement, and checked as far as possible by cross-bearings. The contours were judged by eye alone and make no pretence to give more than a general idea of the terrain.



FIG. 5. PLAN OF HERACLEIA BY LATMUS (see p. 138)

From Von Gerkan, *Griechische Städteanlagen*, Abb. 4 (by permission of W. de Gruyter & Co. and the German Archaeological Institute).

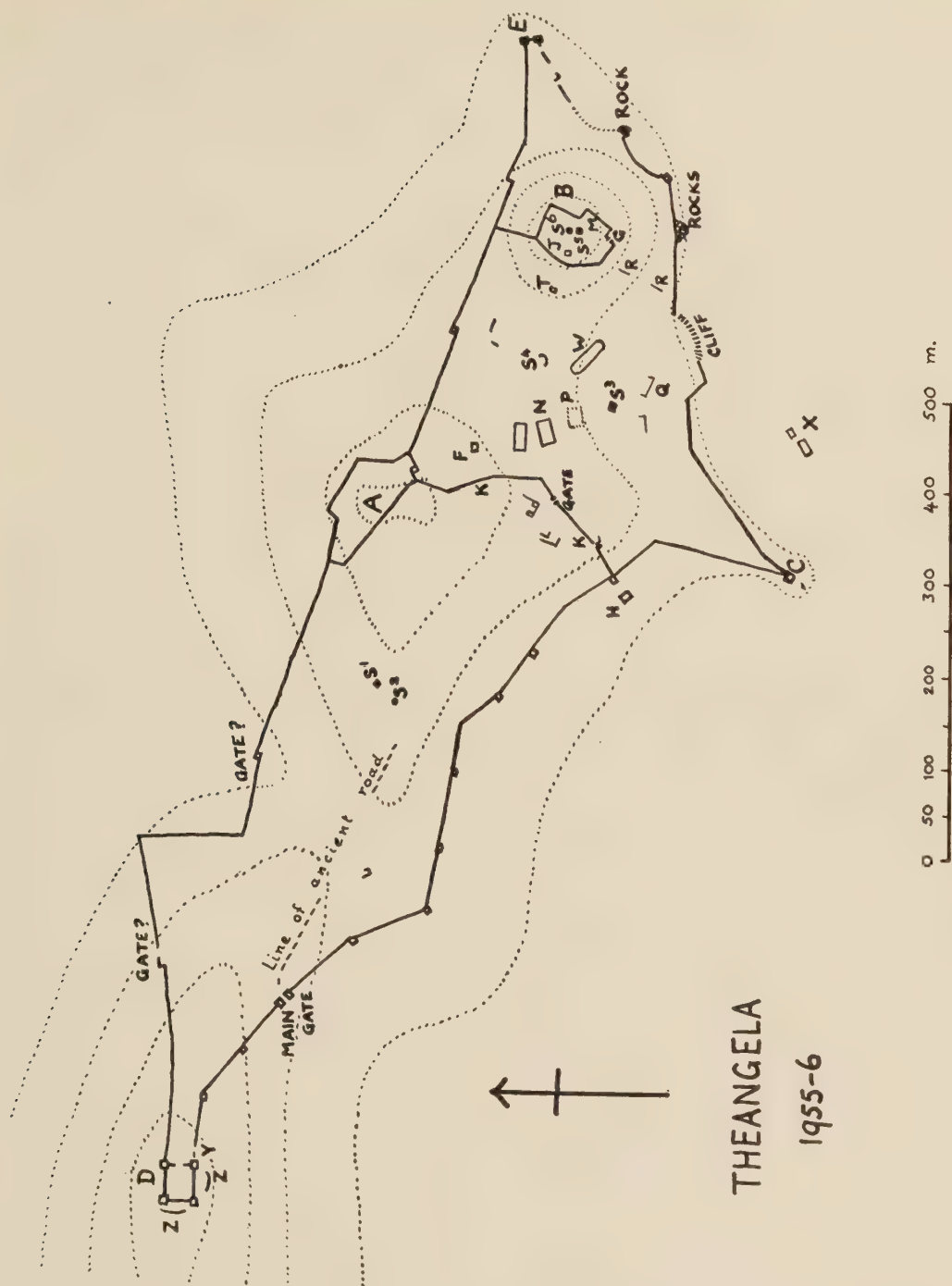


FIG. 6. THEANGELA: PLAN OF THE SITE

the eastern part of the city. The only other gate actually observed is a small postern at Y, close beside the tetrapyrگون on the south side; it remains uncertain whether there is a similar postern on the north side. There must presumably have been an entrance in the north wall, but it does not seem to be preserved. At two points, indicated on the plan, there is among the thick scrub a gap in the wall with some suggestion of a path leading up from below, but in neither place is any actual gateway to be seen. Outside the city wall rectangular buildings of uncertain purpose exist at H and X.

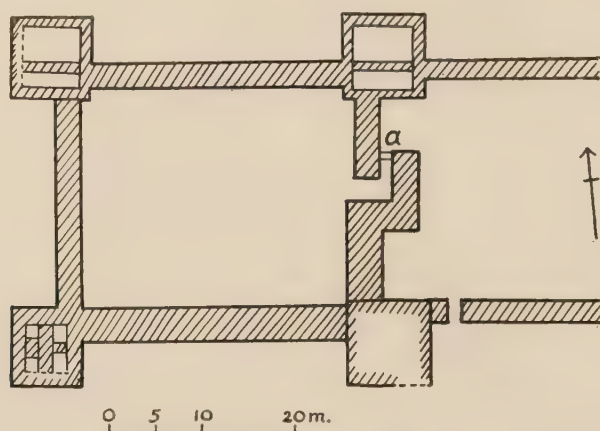


FIG. 7. THEANGELA: PLAN OF TETRAPYRGON

A notable feature is the wall K, 2.25 m. thick, forming a *diateichisma* which divides the city into two parts. All the principal buildings lie to the east; the western portion, apart from two building-complexes close to the gate in K, is almost empty; even house-remains are hardly to be seen.

Both hill-tops A and B prove to have been occupied by inner citadels.¹²⁷ That on A is thickly overgrown, and it is hard to determine what buildings, if any, it contained; on the summit of B, at J, is a rectangular tower,¹²⁸ and below on the east two large cisterns. On the eastern side of B are two terraces; on the upper of these, at M, we found at a depth of 0.40 m. a plain black-and-white mosaic floor. The citadel on B is joined by a wall to the city wall on the north, and probably also on the south by the wall RR;¹²⁹ the entrance is at G.

The very fine tetrapyrگون at D (FIG. 7) was cleared in 1955 sufficiently to determine the plan.¹³⁰ The walls of the four corner towers vary in thickness from 1.15 to 1.90 m., the majority being about 1.20 m.; as was noted in *BSA* l. 113, n. 114, they are evidently designed to resist artillery. They are divided by interior walls into smaller chambers; in the south-west tower in particular the chambers are very small. The entrance from the city on the east consists of a passage with a right-angled bend; the north-to-south part of this has a corbelled roof, the east-to-west part is open (PLATE 21 c). The door-sill at *a* is still in position (PLATE 21 d); in the side-wall is a slot 0.26 m. wide for the wooden bar with which the door was secured.

A remarkable feature in connexion with the tetrapyrگون is the two stretches of wall ZZ. They

¹²⁷ See *BSA* l. 146, n. 243. The ἄκραι mentioned in the Theangelan treaty with Eupolemus are accordingly the peaks A, B, and D. The tower at C measures 9.30 by 6.40 m., which is little larger than the ordinary towers in the wall; it is doubtful therefore whether this should be included in the ἄκραι. Similar considerations apply also to E.

¹²⁸ Illustrated by Robert, *Coll. Froehner* pl. xxviii h.

¹²⁹ The steep south slope of B is covered with a mass of collapsed wall-blocks, and it is not easy to discern any plan. RR is only 0.70 m. thick, but it appears to be continuous.

¹³⁰ Except for the south-east corner tower, which is badly ruined.

stand to a height of some 1.50 m. at the foot of the slope formed by the collapsed ruins of the tetrapylon, and are obviously no part of its plan. That on the west is slightly curved, that on the south more decidedly so. The thickness is 1.65–1.80 m. The masonry (PLATE 21 *e*) is a dry rubble quite unlike anything else on the site. For the significance of these walls see below, p. 94.

The Lelegian house F¹³¹ was partially cleared of the soil and rubbish that had washed down into it; though one room was cleared down to the rock, no sherds were found earlier than Hellenistic.

The tomb T¹³² was also cleared and a plan (FIG. 8) drawn out. This tomb runs not into the hillside but parallel with it; it has a small antechamber at the east end, from which a door leads through to the main chamber. The roof is constructed of large horizontal slabs, each projecting over the slab below; the interior angles are cut away to form a gable-shaped corbelled vault. Three more fragments were found of the late-fifth-century vases (*BSA* I, loc. cit.); the other sherds were Hellenistic and late Roman, obviously washed down from above. On the roof of the tomb we found about forty stone balls, varying in diameter from 11 to 15 cm., some made of the local grey-blue limestone, others of a soft grey-brown sandstone.¹³³ They are well rounded and appear to be cannon-balls. It seems that the roof of the tomb, which is extraordinarily solid, must at some period have been used as an artillery emplacement.¹³⁴

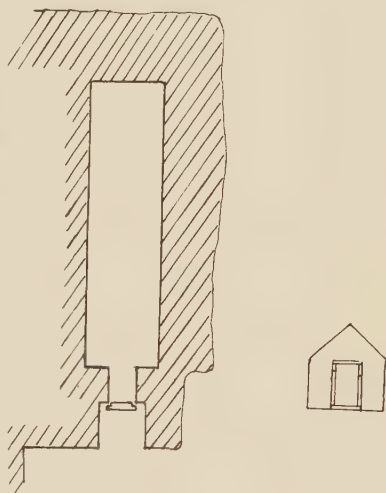


FIG. 8. THEANGELA, TOMB T (1 : 200)

In *BSA* I. 113 we observed that there is no place for a stadium. This is true for any normal-sized structure, but there is in fact at W on the plan a stadium-like building, though it is only 50 metres long by 10 metres wide. The *dromos* is surrounded by a wall only 1.10 m. thick, curved at both ends; no rows of seats are visible, and the debris as a whole is very scanty. This building was no doubt used for athletic exercise; there is at Arycanda in Lycia a 'stadium' equipped with seats for spectators but only 60 metres long.¹³⁵

Of the other buildings little can be said. P contains a few column-stumps and other architectural fragments—the only such visible on the site. They are of post-classical style and probably mark the position of the Hellenistic palaestra mentioned in an inscription found by Judeich.¹³⁶ No clue was discovered to the situation of the temple of Athena. N is a large building of solid masonry, not apparently a temple; a sounding in its interior to a depth of 1 metre produced nothing at all. The walls at Q (PLATE 21 *f*) are of more or less regular ashlar and appear to be terrace-walls.

The evidence of the sherds recovered from half a dozen soundings in the eastern part of the city tells a consistent tale. The main occupation of the site was in the Hellenistic period; a few

¹³¹ *BSA* I. 114, Robert, op. cit., pl. xxvii *d*.

¹³² *BSA* I. 113, pl. 16 *c*.

¹³³ Specimens were taken to the school at Miläs; those that remained at the tomb had by 1956 all been removed by the villagers.

¹³⁴ The alternative is that these stone balls were used for weight-putting or some such athletic exercise; for similar, but much larger, stones found at Colophon and Pompeii, and supposed to be used for athletic purposes, see *Hesperia* xiii. 147, 150 and n. 46. But forty such balls is more than

could reasonably be required in the palaestra, nor is it easy to understand why in this case they came to be collected on the roof of the tomb.

¹³⁵ *TAM* ii. 288–9. This is at least its present condition; the ends are not preserved, but it can never, it seems, have been much longer. To judge by the old plans, the stadia at Iasus (p. 100) and Myndus (*BSA* I. 109) also seem likely to have been well below the standard size.

¹³⁶ *AM* 1887, 334; cf. Robert, op. cit. 65.

pieces were found which probably go back to the fourth century. From the classical Roman period nothing at all came to light, but there was evidently a minor resettlement in late Roman times.

That this city as it stands is the work of Mausolus (as we said before, *BSA* l. 146) we feel there can be no real doubt. We have already emphasized its grandiose scale as compared with the other cities of the Lelegian octapolis; in this connexion the *diateichisma* K is significant. Here, as at Myndus and Halicarnassus, it evidently proved impossible to fill the great new city, and its area was reduced to less than half by the cross-wall. In spite of its position commanding the extensive plain of Karaova to the north, the city looks to the south: the main gate is on the south side, and it is reported that stretches of an ancient paved road are preserved, leading by the Çiftlik valley to the coast. This southern aspect is explained partly, no doubt, by the gentler slope of the mountain on this side, but more especially, we think, by the earlier associations with Alâzeytin and the sea (*BSA* l. 147).

For the interesting question whether the Mausolan foundation replaced an earlier town or was made on a vacant site (*BSA* l, loc. cit.) the new information now available provides somewhat contradictory indications. On the one hand, no sherds whatever earlier than Mausolus came to light.¹³⁷ This is negative evidence, but nevertheless striking. On the other hand, the positive evidence of earlier occupation now assumes rather more formidable proportions. We discussed in *BSA* l. 146 the buildings of Lelegian type, the archaic statuary, and the fifth-century tomb T, and no reason has appeared to cause us to modify what was there said. But to these items of evidence two more must now be added. First, we were shown at Etrim in 1955 the upper part of a broken terra-cotta figurine of archaic date, which was stated to have been found in the ruins; the exact spot was afterwards pointed out to us just inside the city-wall by E. While cult-statues might well be transplanted with the cult from Alâzeytin to Etrim, the same can hardly be said of a figurine of this kind, which would much more likely be thrown away. The presumption undoubtedly is that it belongs to an archaic site at Etrim. Secondly, we have the wall ZZ below the tetrapyrگون at D. This is strikingly incongruous with the masonry employed elsewhere in the city, and does not fit into the general plan; yet its thickness marks it as a fortification wall. We do not see how it can be explained except as the remnant of an earlier wall-ring, as indeed the curvature suggests. The greater part of this wall was obliterated when the tetrapyrگون was built.¹³⁸

In the early fourth century, therefore, it appears almost certain that at least three buildings were standing on the hill at Etrim—a sanctuary, the tomb T, and a fort on the summit of D. Are these sufficient to establish the existence of a pre-Mausolan city on the site, when weighed against the total absence of early sherds? The first two may be considered together; T is surely a royal tomb, and might well be built in this fine position close to a sanctuary, whether or not there was a city there; and a sanctuary does not of course in itself imply a city. The fort Z could well be explained as a defence work belonging to a city on B, to which control of the peak D would be essential:¹³⁹ but again this explanation is not necessary. Z may be an isolated

¹³⁷ Apart of course from the vases in the tomb T. It is to be remembered that no proper excavation was possible: soundings could not be taken to a depth of more than 2 metres in the time and with the resources available.

¹³⁸ We considered other possible explanations of ZZ, but none is satisfactory. An earlier Mausolan fortification seems ruled out by the style of masonry; and after the powerful tetrapyrگون was built a wall of this kind would appear unnecessary—or if it were constructed as an additional precaution, it would surely be made to conform better to

the style and plan of the major fortification. We even considered the possibility that ZZ might be a modern field wall, but its thickness as well as its position make this suggestion quite unacceptable.

¹³⁹ The three peaks A, B, and D are of approximately equal altitude. The approach is steep in all parts (though rather less so between D and C) except on the west, where the hill-side slopes gently down from D towards the pass on the road from Etrim to Çiftlik. This is the obvious line of approach for a hostile force.

Carian fort of early date, like many others in the country, having no connexion with the sanctuary.¹⁴⁰ We are accordingly disposed to attach the greater weight to the negative evidence of the pottery, and to adhere to our view that the Mausolan Theangela had no predecessor on the spot, but that the sanctuary and the tomb were isolated structures belonging to the neighbouring city of Syangela at Alâzeytin.

In any case, it seems to us highly likely that the tomb T is no other than that of Pigres himself, the fifth-century dynast of Syangela. The case is not capable of proof, but the probability is surely very strong. The date of Pigres' death is not known, but he was still reigning in 427/426, and the date of the vases¹⁴¹ agrees excellently with this suggestion. It is indeed hard to imagine whose else this tomb can be.

A further interesting discovery was made about the time of our investigations at Etrim. On the ancient site at Alâkilise, on the coast eastward of Alâzeytin, a group of some twenty silver coins was found, all or most of which bear a griffin's head on the obverse.¹⁴² Half a dozen were brought to us at Etrim. This type was already known and published, but no firm provenience had hitherto been established. Mr. G. K. Jenkins has kindly furnished us with the following note on the previously known specimens, and with the photographs reproduced on PLATE 23 *a*.

'Obv. Head of griffin with mouth open, to right or left.

'Rev. Incuse square containing diamond-shaped lattice frame with sides curving inwards; inside this, circular depression with star pattern or triskeles. No inscription.

'The known weights vary between 2.28 and 1.50 gm., the norm being probably about 2.10 or 2.00 gm. There are twelve pieces in the British Museum and Paris collections, and a lot of 42 pieces was examined at the British Museum in 1948. These latter were almost certainly found together somewhere in Asia Minor. B. V. Head, in *BMC Ionia* 215, nos. 80-81, attributed them to Phocaea, evidently on the strength of the griffin's head, which is characteristic for that mint: but the style of the attested coins of Phocaea is utterly different from our present specimens, and the Phocaeian attribution was always extremely dubious. E. Babelon at first regarded them as Lycian, influenced no doubt by the triskeles which appears on some, and assigned them without comment to the dynast Kuprile (*Perses Achéménides* 70, no. 481). Later however (*Traité*, pl. xxviii. 23 and 25) he relegated them to the category of "Incertaines d'Asie Mineure". Such attributions must clearly give way before the direct evidence of the new find, and the coins must now be regarded as of Carian origin. Their date cannot be given with any great precision, but from their general appearance they should be about 500 B.C., or at least fairly early in the fifth century. For the griffin's head as here depicted there seem no readily available parallels: for the reverse type a partial parallel is afforded by Babelon, *Traité* pl. xl. 10-11, there attributed, rightly or wrongly, to Miletus.'

It is possible, we think, to assign with some confidence a precise attribution to these coins. The site at Alâkilise was described in *BSA* I. 134; it has sherds of the fifth and fourth centuries, but is not of a size or stature to suggest it was the capital of a coin-striking dynast. Yet the classical coins of Caria (excluding naturally the large Greek cities) are exclusively attributable to dynasts; the ordinary Carian cities simply did not strike money.¹⁴³ Alâkilise must surely have

¹⁴⁰ Koca Kale at Gelibolu (above, pp. 65 *f.*) affords one parallel among many. We note that, if Z were accepted as belonging to a city on B, its style of masonry, which is not seen on the Lelegian sites, would suggest that the city was not Lelegian, and therefore not Syangela. This would open up interesting speculations, into which, however, we prefer not to enter here. For early rubble walls see Scranton, *Greek Walls* 145, 184-5.

¹⁴¹ About 420 B.C. (*BSA* I. 113).

¹⁴² These coins were not found in a hoard, but close together, scattered 'as if from an aeroplane', as our informant expressed it.

¹⁴³ The apparent exception, Astyra (*BMC Caria* xxxviii, 59-61), is only apparent. There was never a city of Astyra in Caria; L. Robert's suggested identification of it with the Carian Ptolemais is chimerical; see *JHS* lxxiii (1953) 23, n. 61. The coins have only ΑΣΤΥ, or merely Α, which by no means postulates Astyra.

been a dependency of the Syangelan dynasty at Alâzeytin, and the griffin coins were struck either by Pigres or, if their date is a little early for him, by his predecessor.¹⁴⁴

If the views we have put forward are correct, the Syangelan Pigres is seen to have controlled a considerable area of ground, extending at least to Etrim on the north and to Alâkilise on the east; his realm to the east of Halicarnassus balances that of the Termeran Tymnes on the west, and the political pattern of pre-Mausolan times emerges in some clarity: in this connexion see below, pp. 143 ff.

In *BSA* l. 127, n. 176 we called attention to a sanctuary of which Paton had information in the vicinity of the Lelegian town (which we believe to be the pre-Mausolan Syangela) at Alâzeytin. We now learn from R. V. Nicholls and J. Boardman that the Ashmolean Museum possesses a notable collection of early archaic terracotta figurines which apparently come from the deposit here. It is hoped that they will be published in a subsequent volume of this *Annual*.

Near Etrim, close to the point where the road from the village joins the main highway, on a low hill, is an L-shaped building 33 metres long by 24 metres wide, divided into three main chambers. It is constructed of good solid masonry in irregular ashlar style, and appears to be of good date. Its purpose was not evident to us.

THE HEAD OF THE IASIC GULF

BARGYLIA

The Hellenistic and Roman city occupied a hill about 750 metres broad, which projects south-eastward as a promontory into the shallow lagoon of Tuzla. It lies over 2 kilometres from the open gulf; but a narrow creek permits access to boats of shallow draught as far as the cemetery area on the north edge of the ancient city.¹⁴⁵ If the water at the head of the creek was deeper in ancient times, Bargylia will have had the advantage of a capacious sheltered harbour; and it seemed to us on the spot that the possession of such a harbour would explain the selection of this site for a Hellenistic city, as it would also explain Philip V's use of Bargylia as his base and his fear of his fleet being trapped there.¹⁴⁶ In extent this site seems of approximately the same order as Priene. A plan, showing more ruins than are now visible on the surface, was made by Capt. Graves in 1837.¹⁴⁷ The site, now called Asar, has been described by Newton¹⁴⁸ and Guidi.¹⁴⁹ Above ground there are considerable remains of temples and other ancient buildings, fortifications, and churches, and the traces of a large and a small theatre. But these are entirely of Hellenistic-Roman and later times; the ground is carpeted with grasses and thistles, across which the day-wind blows shrilly, and excavation alone could show whether there are relics of earlier occupation on this site. The well-known piece of wall at the south-west angle (PLATE 22 *a*) resembles the characteristic fourth-century work at Theangela (above, p. 89, PLATE 21 *a*).

Bargylia was a mushroom city like Myndus. Its tribute (normally a sixth of a talent) in the Athenian league, in contrast to the talent paid by Cindya, shows it as a place of little consequence in the fifth century B.C. Its sudden aggrandizement, apparently in the second half of the fourth century, is explained on the assumption that the old dynastic centre of Cindya was incorporated in it, as the old dynastic centre of Termera was incorporated in Myndus. Of the two, though Myndus seems to have had the grander circuit of walls, Bargylia was perhaps the

¹⁴⁴ The possibility (it is no more) that Alâkilise represents Amyndanda (*BSA* l. 165) remains open. Alternatively, it may have been the residence of a member of the royal family.

¹⁴⁵ The situation is very clearly shown on the inset 'Bargylia Creek' on Adm. Chart 1531.

¹⁴⁶ Polyb. xvi. 24.

¹⁴⁷ Adm. Chart 1531, inset 'The Ruins of Antient Bargylia'. Cf. Lebas, *Voyage arch.* Itin. pl. 67.

¹⁴⁸ *Halicarnassus* ii. 604 ff.; cf. *Travels and Discoveries* ii. 57 f.

¹⁴⁹ *Ann.* iv-v. 359 ff.

more flourishing, to judge by the architectural remains and the place that it takes in the epigraphy of the third and second centuries B.C.¹⁵⁰ This was no doubt partly due to its position as the natural outlet of the fertile land in the Karaova.

Apart from visiting Bargylia we have not attempted to investigate the coastal region between Iasus on the north and Siralık to the south.¹⁵¹ There may be ancient remains at Güvercinlik; and the Akarcas have discovered a fortification at Boz Kale above Küllük.¹⁵² We give a photograph of a bit of wall at Salihadası (PLATE 22 *b*).

CINDYA

The site of Bargylia is desolate, and the adjacent plain is virtually uninhabited. Here, as on parts of the Halicarnassus peninsula,¹⁵³ the Turkish pattern of occupation is similar to that which seems to have prevailed in classical times before the fourth-century synoecisms. The bulk of the population lives in two substantial villages (Sığirtmaç and Üçpınar) on the side of the mountain that lies to the east of the Bargylian plain; and the steep ridge above, at an altitude of 200–300 metres, bears the ruins of a large town (Sığirtmaç Kalesi) of classical date (FIG. 9).¹⁵⁴ The crest of the ridge is crowned by a citadel *c.* 120 metres long, which is built in dry rubble masonry tending in places to polygonal (an example, PLATE 22 *c*). We saw no recognizable Hellenistic masonry. An opening, presumably the ancient gate, faces downhill at the north-west end; it was defended by a hyperdexionian bastion, which measures 16 by 12 metres and has a slit window in its south-west side; there is much fallen masonry in the interior of the citadel. A slightly lower spur about 150 metres distant along the ridge to the south-east bears traces of a fortification; and this seems to have formed the apex of an outer circuit, whose line can be traced as it passes close in to the citadel on the north side and apparently descends to take in a lower stretch of the ridge opposite the citadel gate. We could not pick up the line of the outer circuit with any certainty on the south-west side; the slope on this flank bears considerable traces of ancient buildings stretching for some distance down from the ridge. We estimated the length of the whole fortified perimeter as not much less than 450 metres and its greatest width as perhaps exceeding 200 metres.

The site thus appears to have been that of a city of considerable size and importance, the equal in extent of any of the classical city-sites known in Caria. The surface pottery is mainly plain ware; but we picked up several fragments of striped wares, scraps of black glaze, and apparently tile of fourth-century Ionic type. We saw nothing recognizably Hellenistic. Terra-cotta roof-tiles were not in use in the Lelegian towns which were abandoned at the time of the Mausolan synoecism (*c.* 370–365 B.C.), but seem to have been in full use in the town on Salihadası which we believe to be classical Caryanda;¹⁵⁵ on this slight evidence we might suggest that the site at Sığirtmaç was abandoned at a later date than the Lelegian towns, though not so late as the island town of Caryanda. But it must be admitted that the visible evidence for a terminal date on this site is exiguous.

¹⁵⁰ For Myndus see *BSA* l. 108 ff.

¹⁵¹ For Iasus see below, p. 100; for Siralık see *BSA* l. 131 f. For Salihadası (Tarandos I.) see *ibid.* 132; the island had a town (Caryanda?) in classical times, and seems to have been deserted in Hellenistic times, but reoccupied in the Middle Ages; the fluctuation in its population in the last hundred years perhaps deserves remark. In 1865 Biliotti found a single inhabitant (a Samiot) on the island; presumably he was a lone settler. A decade or two later Haussoullier found a 'village' of fishermen's huts on the island (and an inscription, which he assumed to have been brought from Iasus or a neighbouring city; *BCH* viii. 218 ff., Hicks, *JHS*

viii. 103 ff., 116 ff.). In 1953–4 we found the island uninhabited and overgrown with deep impenetrable scrub. At the present day the island is also called 'Gölcü Ada'; the fishermen may have come from Göl.

¹⁵² A. and T. Akarca, *Milâs* 166 f., pl. 53.

¹⁵³ *BSA* l. 168.

¹⁵⁴ The plan is a rough one, the distances being paced; and we did not have time for a proper investigation of the south-west slope below the citadel. Paton and Myres gave a brief description of the site (*JHS* xvi. 196).

¹⁵⁵ Cf. *BSA* l. 132, 159.

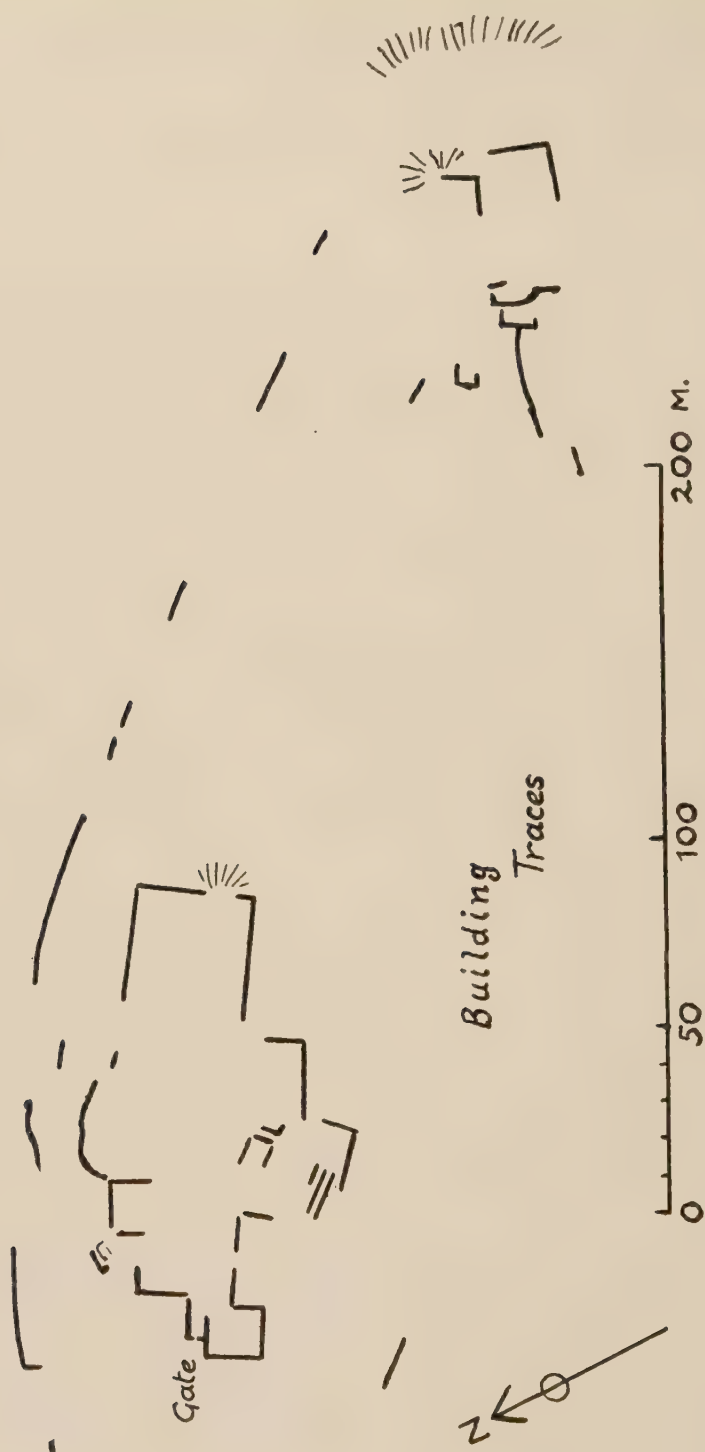


FIG. 9. SIĞIRTMAÇ KALESİ (CINDYA): PLAN OF THE SITE

The position of the sanctuary of Artemis Cindyas seems to have been adequately fixed by the concentration of inscriptions and architectural pieces; it lay in the plain under Sığirtmaç Kalesi on the north-east. This enabled Paton and Myres to recognize Sığirtmaç Kalesi as the site of Cindya. Their map perhaps gives a misleading impression of the geographical relationship of the two sites;¹⁵⁶ but on the spot we felt no doubt that they were right in believing that the city to which this sanctuary belonged was that at Sığirtmaç Kalesi. This is the nearest substantial town-site to Bargylia, into which Cindya is known to have been absorbed; and it is the only site in this region which seems to be of an appropriate period and a scale adequate to represent the not unimportant classical city of Cindya. Cindya paid a normal tribute of a talent in the Athenian league, and in the assessment of 425/424 B.C. it was shown as being under the rule of a dynast. At the beginning of the fifth century it was the abode of Pixodarus, son of Mausolus, who married a Cilician princess¹⁵⁷ and was presumably a forebear of Hecatomnos; it seems likely that his family were dynasts here.

KILDARA

About two hours' walk along the ridge ESE from Sığirtmaç Kalesi¹⁵⁸ another fortified site can be described, which Paton and Myres described under the name 'Cholmekji Kalé'; it is almost certainly the same site which the Akarcas have recently described as a big *kale* on the 490-metre-high Asardağ.¹⁵⁹ It is an 'extensive Hellenic fortress' crowning the mountain top, and consists of an outer circuit with towers (the wall being 1.95 m. thick by the Akarcas' measurement and still well preserved on the north) and an inner citadel which appears to be linked to the outer circuit by two arms of wall on the north. Inside the citadel is a large open area, with underground galleries which the Akarcas take to be cisterns. The masonry of the fortifications is squared work, rough on the face and with vertical drafting on the corners, and so hardly earlier than the fourth century B.C. On the east side of the site was a cemetery; Paton and Myres spoke of a group of chambered tumuli here as being 'of much more advanced masonry (than those of the Myndus peninsula) and too substantial to be surveyed without previous excavation'.¹⁶⁰

Paton and Myres insisted that this site, unlike Sığirtmaç Kalesi, is a 'purely Hellenic fortress'; and they considered that it might have been the successor of the town at Sığirtmaç. This cannot be entirely correct, as Sığirtmaç Kalesi must (as they recognized) be Cindya, which was absorbed into Bargylia. But from the descriptions given it seems not improbable that they were right to this extent, that the fortification on the Asardağ is a creation of the new order in Caria to which Bargylia and Theangela belong; indeed the mention of walls linking the citadel to the outer circuit calls directly to mind the cross-walls at Theangela. Now in the new order of Caria there seems to have been an intermediate city between Bargylia on the west and Hydissus (at Karacahisar) on the east, to judge by Robert's discovery of a bilingual fourth-century decree of the Kildareis at a cistern a little west of the village of Kuzyaka, which lies about 5 kilometres south-south-east of Asardağ Kalesi.¹⁶¹ There are no visible ancient remains at Kuzyaka, though sherds and oddments are found on the south of the village; and Robert did not succeed in locating the city. The Akarcas have now recognized the site on the Asardağ as that of Kildara; we had ourselves independently formed this opinion, and accept their identification as highly probable.

¹⁵⁶ Loc. cit. 196, map pl. 10. Philippon's map errs in the other direction, making the sanctuary seem nearer to Çömlekçi Kalesi (Asardağ) than to Sığirtmaç Kalesi. For the site of the sanctuary cf. also Laumonier, *RA* 1933, ii. 49.

¹⁵⁷ Hdt. v. 118.

¹⁵⁸ This is the distance as quoted to us by villagers. We have not ourselves been to the Asardağ (Çömlekçi) site.

¹⁵⁹ *JHS* xvi. 196 f.; A. and T. Akarca, op. cit. 168.

¹⁶⁰ Op. cit. 254.

¹⁶¹ *RA* 1935, ii. 163; *Hellenica* viii. 14, no. 11.

Nothing is known of Kildara prior to the fourth century, save that the entry $\text{K}\iota[\lambda]\lambda\alpha\rho\epsilon\varsigma$ has been restored with great probability in the fourth Athenian quota list (of 451/450), paying a tribute of a sixth of a talent, and that $[\text{K}\iota]\lambda\lambda[\alpha\rho\epsilon\varsigma]$ has been restored with great skill in the assessment of 425/424 B.C., paying two talents; if the restoration in the assessment list is correct, Kildara would appear to have been ruled by a dynast at this time; but we regard this as doubtful.¹⁶²



FIG. 10. IASUS: GENERAL PLAN

IASUS (FIG. 10)

The site has been visited and described by a number of scholars,¹⁶³ and a whole volume, announced some years ago as forthcoming, in the Roberts' series *La Carie* is to be devoted to the region of Iasus and to cover the archaeology of the place. We do not therefore attempt a detailed description of the site.

The position of the Hellenistic-Roman city on the peninsula of Asın Kale is assured. The

¹⁶² See below, pp. 145 f.

¹⁶³ See especially Texier, *Description de l'Asie min.* iii. 135 ff., pls. 142-9; Judeich, *AM* xv (1890) 137 ff. (with references to earlier accounts of the site; for the convenience of those

who look at the illustrations we remind the reader that Judeich's figs. 2, 4, 7 are not at Iasus but at Halicarnassus, Thoricus, Bargylia); Guidi, *Ann.* iv-v. 345 ff.

peninsula is a good kilometre in length and joined to the mainland by a flat isthmus.¹⁶⁴ It had a closed harbour on the west of the peninsula. There is some fertile land on the north, with two valleys descending from the hills on the north-west, but, as Strabo says, the land is poor, and Iasus could not on its own resources be a large city. At the present day there is a village (Kuren) at the isthmus with forty to fifty houses, and a *çiftlik* on the bay to the north. In antiquity, to judge by Strabo's story of the market bell (xiv. 658), fishing was a more important industry at Iasus than it is now.¹⁶⁵ But Iasus was not a naval power; the one ship that it sent to the Persian fleet at Mycale in 334 B.C. was too slow-moving and was captured in the tip-and-run raid on Miletus.¹⁶⁶ Diodorus records the destruction by Lysander of a city Θάσσω or Θάσος in Caria, and gives the figure of 800 adult males massacred on this occasion; if this is to be referred to Iasus, it is clear that the population was very much greater in antiquity than it is now;¹⁶⁷ the urban population, at a time when Iasus may have been depleted after the sack by the Peloponnesians in 412 B.C., may on this figure have numbered some 3,000.

The peninsula was encircled by a fortification which was being demolished in the later years of the last century. This was largely post-classical, to judge by the existing remains of its core on the west;¹⁶⁸ but Judeich considered that the trace as a whole was ancient, and he saw enough ancient work to enable him to give a description of towers and masonry, with a drawing of the face (his fig. 1) which shows good isodomic work standing to a height of ten courses. In the southern part of the peninsula we saw some traces of walling on a line that seems to run inside that of the late perimeter, but should hesitate to affirm that they belonged to an older circuit. The fort on top of the peninsula is Ottoman, and there appears to be no sure trace of an ancient citadel here. On the north slope is the theatre; and in the low ground to the north of this, as Texier's plan (his pl. 142) shows, were the principal civic buildings, among them no doubt the Ptolemaion and Antiocheion which are known from inscriptions.¹⁶⁹ There was an extensive cemetery of built tombs on the landward side of the isthmus, and a Roman aqueduct.

The terrain north of the isthmus is flat. But to the west of the harbour the ground rises to a barren plateau, whose edge is defended by the well-known land wall of Iasus. This fortification, forming something less than a half of a complete circuit, runs for about 3 kilometres; it is built in fairly well-coursed (though not quite regular) masonry, with a tendency to long blocks; it has a thickness of *c.* 1.70 m., with a narrow rubble filling between the laid outer and inner faces.¹⁷⁰ The curtain is constantly interrupted by enfiling jogs, in which are set a sally port and slit window, and by towers, which are mostly round (PLATE 22 *d*).¹⁷¹ The latter are hollow, and have an outer door on either side next to the curtain and five windows in the bow; they communicate by a door with the interior of the fortress, where staircases lead up onto the parapet. Towers and jogs are set at frequent intervals, and the exterior ports are consequently extraordinarily numerous; Judeich counted 68 of them and 117 windows. At this rate the fortress would, if complete, have about 150 ports. The windows are *c.* 60 cm. high and *c.* 50 cm. broad on the inner face (but narrowing to barely half that width on the outer face). The main gateway on the north side has a recessed entrance and is guarded by windows; Texier gives a drawing of it in elevation (his

¹⁶⁴ The ancient authorities (Strabo xiv. 658, Steph. Byz. s.v.) speak of it as an island, but it was probably joined to the mainland in antiquity.

¹⁶⁵ There is, however, a big fish-garth ('dalyan') across the bay from Iasus at the outlet of the 'Little Sea'.

¹⁶⁶ Arrian, *Anab.* i. 19, 11.

¹⁶⁷ Diod. xiii. 104, 7. *ATL* i. 492 assumes that the place destroyed was really Cedrae, but we doubt whether Cedrae can have been so populous.

¹⁶⁸ Cf. Paton, *CR* i (1887) 176 f.

¹⁶⁹ Robert, *Ét. anat.* 452.

¹⁷⁰ Judeich op. cit. 144 ff. Judeich's figure of 3.5 km. length seems calculated to include the circuits of the towers. He quotes 1.75–2.00 m. for the wall thickness; we measured it as 1.60–1.70 at several points.

¹⁷¹ Cf. Texier, op. cit. pls. 147–8; Judeich, op. cit. figs. 3 and 5–6.

pl. 149. 1), and we give its plan (FIG. 11).¹⁷² At the extreme east end by the village of Kuren the wall has been dismantled. Von Gerkan believed that he could trace the wall in places on the seaward side, where he noted a stretch 300 metres long and up to 3 metres high, with jogs but no towers.¹⁷³ He does not indicate to what part of the circuit this belonged; we were not at the time of our visit aware of his discovery, and though we returned from the west end by a southerly route we noted nothing on the seaward side except some traces of terrace walling on the slope near the harbour. But the scrub is dense over a great part of the plateau.

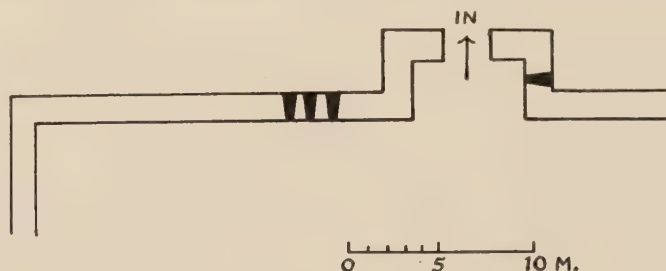


FIG. 11. IASUS, LANDWARD FORTIFICATION. DETAIL OF MAIN GATE

Von Gerkan drew attention to a series of hut remains, in roughly coursed masonry with traces of corbelled vaulting, in the vicinity of the north-west bulge of the landward circuit.¹⁷⁴ They are of oblong plan with rounded ends. Adding our own observations to von Gerkan's, we note that they range between c. 6 and 12 metres in length, with a breadth of upwards of half the length; the wall thickness seems to be upwards of a metre; we believed that we could recognize a doorway with monolith lintel and small (window?) apertures. We noted two pairs of these huts inside the bulge, each pair being set approximately end to end with a narrow interval between. Von Gerkan also noted a pair outside the fortification wall near by and possible traces by the main gate of the circuit. In one case he noted that the two huts formed the terminals of a ring-wall about 30 metres in diameter and a metre thick (his fig. 14, here FIG. 12). This acute observation of von Gerkan's seems to us to provide the clue to the understanding of these huts; each pair with its ring-wall must have formed a shepherd's pen, the entrance to the circle being the opening between the two huts. The masonry resembles that of Lelegian monuments on the Halicarnassus peninsula, and we believe that these structures are cognate to the 'compound tumuli' of that peninsula, which we have already sought to explain as shepherds' pens.¹⁷⁵ Like von Gerkan we found no sherds or other evidence of date.

The central problem of the topography of Iasus is the great landward wall on the plateau west of the harbour. The scholars who have visited Iasus are divided in their judgement of it. Judeich maintained that this was the city circuit of Iasus until the late fifth century B.C.,¹⁷⁶ and von Gerkan returned to this view¹⁷⁷ after it had been attacked by Krischen. Krischen himself,¹⁷⁸

¹⁷² On the right side of the gate court, high up, is a window c. 60 cm. high; in the curtain to the left are three windows c. 1.05 m. high, set low down in the wall.

¹⁷³ *Griech. Städteanlagen* (1924) 115, n. 1.

¹⁷⁴ *Op. cit.* 116 n., fig. 14; the figure of 2.30 m. for the breadth is evidently a misprint.

¹⁷⁵ Cf. *BSA* l. 166 f. Guidi's fig. 9 (*Ann.* iv-v. 354) poses a problem which we have discussed (*BSA* l. 166, n. 346). Von Gerkan's huts are not mentioned in Guidi's text; but since he speaks of tombs of Lelego-Carian type at Iasus and illustrates them with his fig. 9, we are inclined to suppose

that the huts did not in fact escape the notice of the Italian party and that Guidi's notice contains an oblique reference to them.

¹⁷⁶ *AM* xv (1890) 149 ff.

¹⁷⁷ *Op. cit.* 115, n. 1. G. Jost, in his dissertation *Iasos in Karien* (Hamburg, 1935) 77 ff., attaches himself to this theory, but he does not appear to have investigated the matter.

¹⁷⁸ In a lecture reported in *AA* 1913, 476. With his 'camp retranché des Leleges' Texier may be considered the originator of this explanation.

supported by Guidi,¹⁷⁹ maintained that the fortification could not be a city circuit but was a work of purely military character. We take the problem up again, because it seems to us that by examining it in its different aspects one may be able to proceed farther towards a definite conclusion about the purpose and date of the fortification.

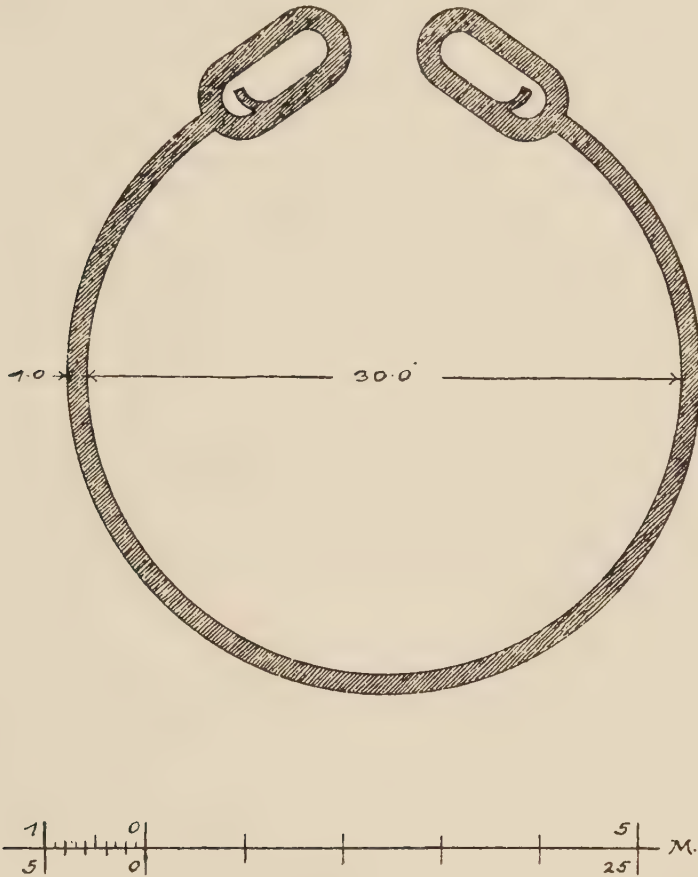


FIG. 12. IASUS, CURVED BUILDINGS

From Von Gerkan, *Griechische Städteanlagen*, Abb. 14 (by permission of W. de Gruyter & Co.)

In the first place we regard it as quite certain that the plateau was not an inhabited city site. Save at the east corner of the perimeter close to the isthmus, where fragments of late tiles can be picked up in a small area both inside and outside the line of the circuit, we saw no sign of ancient occupation there; Krischen remarked on the absence of any rock cuttings to take the foundations of public buildings, and sherds, tiles, and building traces are not to be seen.¹⁸⁰ Secondly, this circuit is quite unlike any city circuit on this coast. Its character was noted by Krischen and is well brought out by Guidi. With its closely spaced sally ports and gates this fortification bears witness to an intention of aggressive defence such as a civilian population

¹⁷⁹ Op. cit. 349 f.

¹⁸⁰ The compounds mentioned above (p. 102) lie both inside and outside the circuit and seem to be unrelated to it; in any case they cannot be considered to be city habi-

tations. The piles of stones, with tile fragments and limekilns, which von Gerkan saw in the interior of the site, do not seem to us the right sort of evidence; early Greek cities do not disappear in that way.

could not undertake. It must have been designed not as a city but as the seat of a garrison; and a garrison large enough to man this perimeter could well be called an army. But it is no rough-and-ready or temporary fortification; it is ingeniously planned, massive, and carefully built, and was certainly intended to be a permanent camp.

Judeich assumed that the fortification was of archaic date. But the arrangement of the gates, round towers, and windows does not seem likely to be archaic, and Krischen in fact judged that the fortification could hardly be earlier than the close of the fifth century. On the other hand, a date as late as Hecatomnid times seems improbable. Salients of the sort common in Mausolan circuits (see below, p. 138) seem to be lacking here, where the wall is designed to keep a consistent level round the hill slope; and the characteristic drafting at the angles does not seem to occur. In any case it seems to us improbable that this fortification was ever completed. The circuit wall breaks off suddenly on the west, and we saw in the scrub no trace of any line continuing from this point. If, as Judeich supposed, the reason for the absence of the southern half of the circuit were that the wall here was demolished for reuse in the fortifications of the city on the peninsula, it would be astonishing that the north-eastern part, which was so much more readily accessible, was not dismantled first; and in any case it must be extraordinary that the western end (which is far from the sea and from human habitation, and separated from the rugged coast here by more difficult country) should have been so systematically demolished in preference to the part still standing near the harbour head. It seems to us therefore impossible that in its western part the circuit can ever have been complete. It seems to us unlikely that the Hecatomnids would in the first place have wished to have a permanent army camp at Iasus, and equally improbable that they would have abandoned the project if they had gone so far with it. The fortification should therefore date before Mausolus, and so to the late fifth or early fourth century.

In this period two potentates held Iasus. Amorges, bastard son of the ex-satrap Pissouthnes, and presumably heir both to his riches and to his revolt against Darius II, was occupying Iasus with a considerable mercenary corps¹⁸¹ when it fell before a surprise attack of the Peloponnesians in 412 B.C.; after this mishap the city, with the person of Amorges, was handed over to Tissaphernes, who established a garrison there.¹⁸² It would seem then that both Amorges and Tissaphernes had the opportunity to build this fortification. Against the attribution to Tissaphernes may be urged the unfinished state of the circuit; there is no reason why he—any more than the Hecatomnids—should have left the fortress unfinished if he had in fact begun it. But it is the topographical situation that seems to us decisive. The site has been chosen for its proximity to the sea, though it does not in fact control the harbour. The ruler who built it would seem not to have aimed at naval power, yet he feared attack from the landward side rather than from the sea. Now Tissaphernes is known to have garrisoned some of the important Greek cities of the coast (as Cnidus, Miletus, and Antandrus); but he did so in order to maintain control of the cities themselves, and it is difficult to believe that he would have selected a semi-peninsular site for a standing camp. Amorges, on the other hand, was in revolt against the land-power in Asia; he had collected a mercenary corps and he had the wealth which would enable him to build himself a massive and handsome fortress. While he did not himself possess a fleet, he was certainly on terms of amity, if not formal alliance, with the Athenians;¹⁸³ and it was therefore natural that he should consider himself secure from attack by sea. But the arrival of a Peloponnesian squadron, which was spurred to unexpected activity by the Syracusan contingent, caught him off his guard.

¹⁸¹ Thuc. viii. 19, 2 shows that Amorges was capable of taking independent military action on the Ionic coast.

¹⁸² Thuc. viii. 28, 2–29, 1.

¹⁸³ Thuc. viii. 19, 2; Andoc. iii. 29.

We are therefore convinced that Amorges was the builder of the land wall at Iasus; and we note that the Akarcas, who are especially familiar with Iasus, take this view.¹⁸⁴ The fortress demonstrates the magnitude of Amorges' revolt; for a considerable army must have been needed to man it. Amorges seems to have been in advance of his generation in his realization of the possibilities of maintaining a permanent state of revolt on Persian territory. Behind the barrier of the Carian mountains, with a fortress of the most modern type manned by a private army, with the sea at his back and the friendship of the Athenians, he would soon have been beyond the reach of the Persian arms. If the collapse of the Athenian offensive in Sicily had not brought the buccaneers of Syracuse into the eastern Aegean, his fortress would no doubt soon have been completed and his position would then have been impregnable. It is thus easy to understand why Tissaphernes and the king regarded the suppression of Amorges as a matter of so great urgency.¹⁸⁵

Thucydides speaks of the πόλις of Iasus in 412 B.C. (viii. 28, 4); and this implies that it was a small fortified city. We found no trace of archaic or classical habitation on the peninsula, but know of no alternative site for the city, which was not by any means insignificant in the fifth century B.C.¹⁸⁶

INSCRIPTIONS (IASUS)

1. Kuren; built upside down into a wall below the house of Mustafa Bozan, a block 0.38 m. high, 0.80 m. wide, thickness not ascertainable; inscription in a raised panel, round which

the four sides are bevelled away. Hellenistic letters 11–13 mm. high, smaller in lines 10 and 20 for lack of space. Squeeze, PLATE 23 b.

δαიმόνων ἀγαθῶν
Δωρίωνος τοῦ Δωρίωνος {τ}
Γλαυκίου τοῦ Ἑπαινέτου
Ἑπαινέτου τοῦ Γλαυκίου
5 Λυσιμάχου τοῦ Ἰάσονος
Ῥόδωνος τοῦ Ἑπαινέτου
Ἄντιοχέων· Εὐφρονος τοῦ Ὀρθίου[υ]
Ἀγαθοβούλου τοῦ Εὐφρονος
Γαλατῶν· Σαραπίωνος το[ῦ]
10 Δημητρίου Μήδου·

[Κ]τησίου τοῦ Ἀπολλω-
[ν]ίου Βιζωνίτου· Ἑρμίου
[τ]οῦ Διονυσίου Τυρανοῦ·
Ὑβρίστου τοῦ Διονυσίου
15 Κίλικος· Κέρδωνος τοῦ
Ἑρμῶνος Σκύθου· Ἑρμίου
τοῦ Δημητρίου Σινωπέως·
Κέρδωνος τοῦ Ἀντιπάτρου
Ἀραδίου· Ἡρακλείδου τοῦ Ζη-
20 νοδότου Σιδωνίου

The formula δαिमόνων ἀγαθῶν is characteristic of the epitaphs of Iasus and Mylasa. All the defunct are foreigners; we should suppose them to be the casualties among a force of mercenaries who at some period fought in the interests of Iasus.¹⁸⁷ They are drawn from a wide area, extending from Scythia to Palestine and eastwards to Media; Greece and the West are not represented. Galatians, Scythians, Medes, and Cilicians are all familiar in the Hellenistic armies; their Greek names are also normal at this period. More unusual are the men from Bizone and Tyras on the Black Sea. Bizone is very rarely mentioned; almost all that is known of it is that it was swallowed up by an earthquake before the time of Augustus.¹⁸⁸ The present inscription affords a rather indefinite *terminus post quem* for its destruction. Tyras at Akerman is better known,¹⁸⁹ but its citizens are seldom mentioned beyond the immediate vicinity of the city.

¹⁸⁴ Op. cit., 153; cf. *ATL* i. 492.

¹⁸⁵ Cf. Thuc. viii. 5, 4–5; 28, 2.

¹⁸⁶ e.g. *BMI* iii, no. 440 (regulation of the priesthood of Zeus Megistos); *AM* liv (1929) 90 f. (woman of Iasus on a Samian funerary altar). Iasus paid a normal tribute of a talent in the Athenian league, and was one of the cities where ΣΥΝ coins were struck in the early fourth century.

¹⁸⁷ With so many barbarians included, this seems the

inevitable explanation, though elsewhere, as in the Athenian lists *IG* ii.² 1956–7, the names of mercenaries are given without patronymic.

¹⁸⁸ Strabo i. 54, vii. 319; Mela ii. 22; Pliny *HN* iv. 44. Stephanus gives three forms of the ethnic, Βιζωνάσιος, Βιζωνίτης, and Βιζώνιος. Cf. also the references in *REG* lxi. 139, 142 to the cult of Dionysus in bull form at Bizone.

¹⁸⁹ See the copious article in *RE* s.v.

What event in the history of Iasus is reflected in this inscription we see no means of determining. A date about 200 B.C. would suit the style of the script; this was a troubled time for Iasus, which was occupied first by Philip V, then by Antiochus III, but it seems hardly profitable to speculate on the identity of the army to which our mercenaries may have belonged.

2. Kuren; in the wall of an empty house, a block 0.20 m. high, 0.52 m. wide, 0.17 m. thick. Irregular letters about 2 cm. high.

ἀγαθῇ τύχη.
Ναυκληρικὴ
Μενίππου ΓΓ ΕΙC
καὶ τῶν χατοι-
χομένων

5

L. 3. Possibly τρεῖς = τρίς. Hardly ἰσσίς.

3. Kuren, at the door of another empty house close by the last, a block of yellow stone 0.30 m. high, 0.62 m. wide, 0.13 m. thick. Irregular letters 2-3 cm. high.

Εὐφρόσυνος Ἄντι-
οχίδος, μηδένα ἐξόν
ἵνα τῆν (*sic*) εἰ μὴ Σοραθίωνι
καὶ Χρατίσστη Ὀρέντου· ἂν δ' εἴ-
5 ς καταφρονηθῇ, δώσει ἰς τὸν
Καίσαρος φίσκον ✕ ρν'

τῆν is presumably for τεθῇ with *nu* added to avoid hiatus, as often. The construction is interesting as anticipating the modern Greek substitute for the infinitive. The inscription is badly written and hard to read, and the personal names in lines 3-4 are not entirely guaranteed. The metronymic Ἀντιοχίδος is noticeable.

4. Kuren, unearthed in 1956 by the landing-stage, a lintel-block 0.14 m. high, 1.22 m. wide, 0.39 m. thick, inscribed in good regular letters of about 1st c. B.C.-1st c. A.D. PLATE 23 c.

Τίτος Φολκ[ί]νιος Ἐπαφρόδιτος κατεσκευ-
ακῶς τόδε τὸ μνημεῖον ἑαυτῷ καὶ δεδωκῶς
θέσιν Διογενίδι Διογένους Ἀντιοχίδι μετοί-
κωι τῇ ἑαυτοῦ γυναικὶ καὶ Φιλαθηναίωι Ἀντιόχου
5 καὶ ἂν τινι ἐτέρωι ζῶν αὐτὸς ἐνγράφως συνχωρήσω

We take δεδωκῶς θέσιν to mean 'having granted the right of burial' rather than 'having given burial', i.e. actually buried. The expression is somewhat unusual in the case of a wife; and much more so is the designation of the wife as μετοίκω, to which we are not aware of a real parallel. The standing of metic is not one which its possessors normally care to mention in an inscription.¹⁹⁰ It seems likely that the term is added here with some legal purpose which can hardly now be determined.

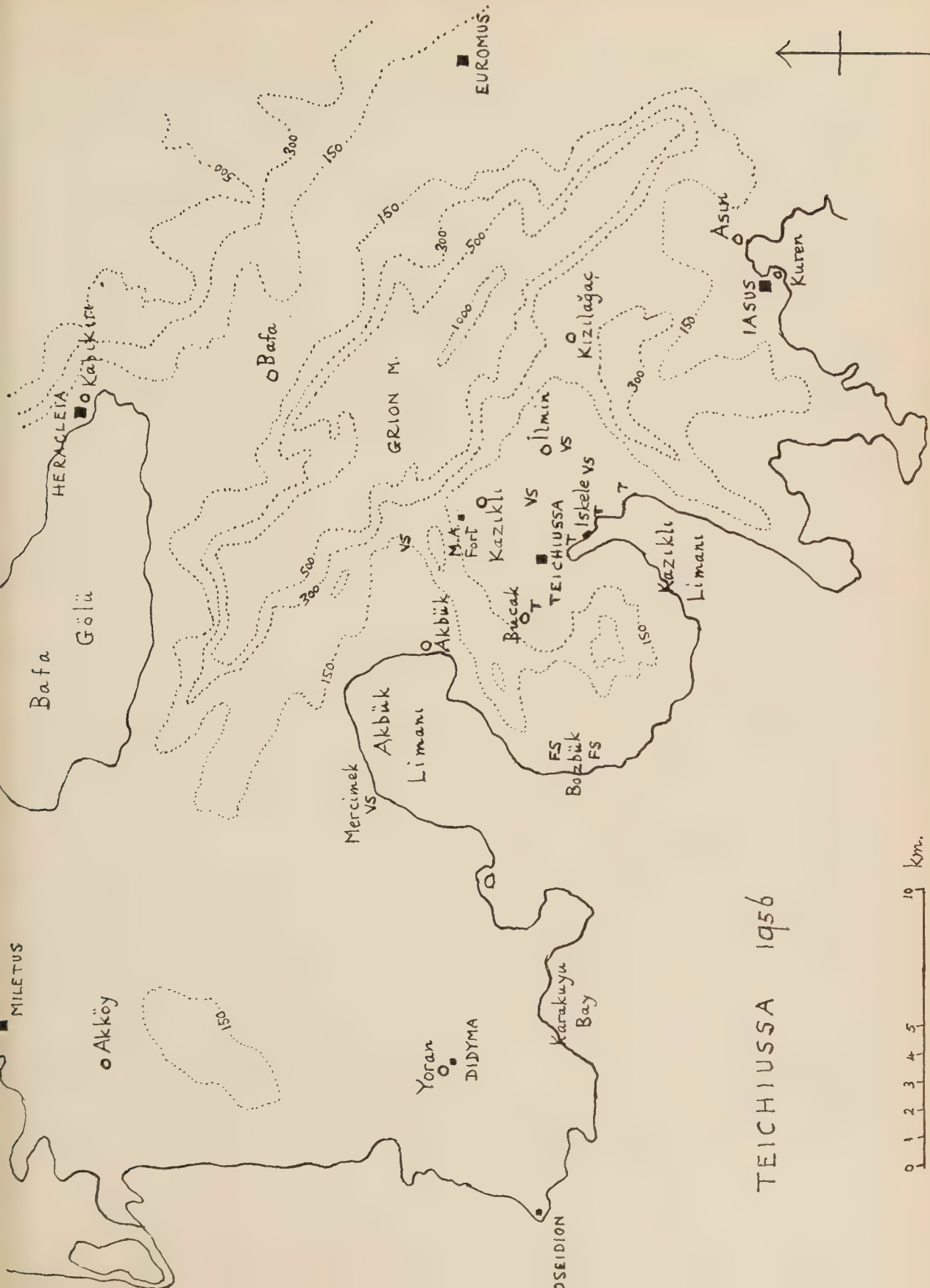
We noted a number of other inscriptions at Kuren, some of which are collected at the school, but we understand that these will be published by J. and L. Robert in a forthcoming volume of *La Carie*.

TEICHIUSSA (FIG. 13)

From Didyma two paths lead eastward, in about five and six hours respectively, to Akbuk. On the upper and shorter path, a little before its junction with the other near Mercimek, is the

¹⁹⁰ Prof. H. Hommel, to whom we are gratefully indebted for his advice in this matter, points out to us that, when in

IG i.² 329 Cephisodorus is designated as μέτοικος ἐμ Πειραιεῖ, this is certainly not intended as a compliment.



boundary-stone of a precinct of Apollo, republished below, no. 15. On the lower, more southerly road, at a spot called Yanık Yer close to Mercimek, are the ruins of a large village of late antiquity, including houses and churches, a gable-shaped sarcophagus-lid, a base or altar with mouldings, and the inscription no. 17.¹⁹¹ Akbük contains no antiquities of any consequence beyond a ruined church, several large squared blocks, and the epitaph no. 16.

From Akbük the path runs eastward for half an hour, then bends southward to cross a pass some 300 metres in height to Kazıklı. At the northern end of this pass is a village site of fair extent; the ground is strewn with building-blocks, with the occasional outline of a house, a cistern, a group of half a dozen simple graves, and an oil millstone formed of a humped block with grooves cut in the convex surface. On the other side of the pass, a bare ten minutes from Kazıklı, is a medieval fort of rectangular plan about 100 metres long by 60 metres wide.¹⁹²

Another path from Akbük leads by the coast in about two hours to Bozbük. There is no modern village here, but some remains of antiquity are to be seen at two points¹⁹³ called Tatlıkuyu and Yavankuyu. Each comprises a small area of flat ground by the shore, on which are scattered masses of building-blocks, several oil-presses of 'ashtray' shape, a small building with arched roof, and another with an apse. At Tatlıkuyu is a more unusual oil-press cut out of a mass of rock, 2.30 m. in diameter and over 1 m. high; it has a high rim pierced by a hole on either side. At Yavankuyu is the inscription no. 12.

Kazıklı is a large village¹⁹⁴ containing numerous ancient stones; it stands on rising ground looking down on a broad fertile area around the head of the bay. This territory, enclosed between the villages of Bucak, Kazıklı, İlmin, and the Iskele, comprising in all about 5 square miles, slopes gently down to the level ground by the shore, interspersed with a number of low hills, of which the most considerable are close to the Iskele. Over all this area remains of antiquity are abundant; with the exception to be noted later, they seem all to date to the Imperial period.

At Örtülü Kuyu, fifteen minutes south-east of İlmin, is a village site with extensive house-ruins and an oil-press. Farther to the south-west, towards the Iskele, is another more extensive village site at Erenler; here are many building-blocks, a wall of large well-cut stones, and an oil-mill of 'ashtray' shape with a broken millstone of the type described above.¹⁹⁵ Other squared blocks of dark stone are lying around; this stone is said not to occur in the neighbourhood but to have come from the region of Bodrum. Beside the wall mentioned above fragments of clothing are suspended on a bush, the spot being regarded as holy and a cure for all diseases. To the west of İlmin is a third village site of less extent, and to the west again there are some ancient stones at Kapaklı Kuyu.¹⁹⁶

Tombs are common, especially in the area close to the shore of the bay. In a field south-east of Bucak is an underground vaulted tomb with plastered walls, and at the Iskele stands a large vaulted mausoleum to which belongs the inscription published by Cousin and Deschamps *BCH* xviii (1894) 21, no. 11.¹⁹⁷ But the most characteristic tombs consist of a grave-chamber sunk in the rock and roofed with large flat slabs of stone; these are generally three in number, but in

¹⁹¹ This seems to be the spot marked as Jaly (i.e. Yah) on Kiepert's map. There are one or two houses but no village. The 1:100,000 map of southern Ionia in *Milet* iii. 5 marks numerous remains on the Milesian peninsula.

¹⁹² Mentioned by von Diest: see no. 2 below.

¹⁹³ Marked 'Ru.' on Kiepert's map.

¹⁹⁴ It would certainly by a *nahiye* if its communications were better. The roads are so bad that even jeeps only rarely and unwillingly penetrate to it.

¹⁹⁵ There was perhaps an oil factory here. Olives are the

main product of the district and are exported as far as Ayvalık. Ayvalık is itself noted for its olive-oil, which is used for cooking, that of Kazıklı for making soap. For oil troughs in this region see Paton and Myres, *JHS* xviii. 211.

¹⁹⁶ For Kapaklı Kuyu see Robert, *Ét. anat.* 437 ff., but the site is inconsiderable in comparison with the others in the neighbourhood.

¹⁹⁷ The left-hand portion of this inscription is still lying there; in line 1 the stone has in fact ΦΙΛΛΥ, as copied by the editors.

one case (PLATE 22 *f*), a little north-west of the Iskele, the roof is formed of a single slab measuring 3.30 by 2.20 by 0.18 m. (about 1.3 cubic metres of stone).

The whole of the Kazıklı peninsula is quite without running streams, and water is obtained exclusively from wells.¹⁹⁸ Only on the high ground at Kızılağaç is running water to be found.

At one point only are remains earlier than the Roman period to be seen. Half a mile from the extreme tip of the bay, looking directly down upon it, is a low hill some 40–50 metres high called Doğanbeleni. The upper part of this hill is encircled by the ruins of a massive wall of irregular quarry-faced trapezoidal masonry (PLATE 22 *e*); the circuit can be easily traced, but for the most part not more than a single course of the outer face remains visible above ground. In the three or four places where the inner face is discernible the thickness is consistently 2.60 m. There are four quadrangular towers in the circuit, in the middle of the east and west sides and at the north-east and south-west corners; these towers are about 6 m. wide and project about 4 metres. This wall encloses an area some 175 metres long from north to south, with a maximum width in the middle of 80–90 metres, narrowing to 40–50 metres at the extremities. The interior is largely occupied by two rocky knolls; the summit of the higher southern knoll carries a rectangular tower some 10 by 6 metres, constructed of small blocks loosely fitted, still standing over 1 metre in height. The rest of the ground is more or less flat, and has been sown in recent times. On the west side near the middle is a hollow now filled up, but said to have been formerly deep; this is likely to have been a cistern. Surface sherds are fairly abundant, but quite devoid of character.

That this is the site of the long-sought Teichiussa we regard as beyond reasonable doubt. Ancient notices of Teichiussa are, for a place of only minor importance, remarkably informative: we collect them here for convenience.

T. 1. Roehl *IGA* 488, *BM Cat. Sculpt.* i. 1, B 278 (Didyma, 6th c. B.C.): Χάρης εἰμὶ ὁ Κλέσιος Τειχιόσης ἀρχός· ἄγαλμα τῷ Ἀπόλλωνος.

T. 2. *ATL* i. 418–19. (454/453 B.C.): [Μι]λέσιοι [ἐκ Τ]ειχιόσσε[ς]. (427/426 B.C.): Μιλέσιοι, Λέρος, Τειχιόσσα, and so down to 420/419 B.C.

T. 3. Thuc. viii. 26: αἰσθόμενοι (sc. Spartan reinforcements) ἐπὶ Μιλήτῳ ὄντας Ἀθηναίους ἐς τὸν Ἰασικὸν κόλπον πρότερον πλεύσαντες ἐβούλοντο εἰδέναι τὰ περὶ τῆς Μιλήτου. ἐλθόντος δὲ Ἀλκιβιάδου ἱππῶ ἐς Τειχιοῦσσαν τῆς Μιλησίας, οἵπερ τοῦ κόλπου πλεύσαντες ἠϋλίσαντο, πυνθάγονται τὰ περὶ τῆς μάχης.

T. 4. Thuc. viii. 28: the Spartans attack Iasus from Teichiussa.

T. 5. Ath. 351A–B: ἐν Τειχιοῦντι δὲ τῆς Μιλήτου μιγάδων οἰκούντων ὡς ἑώρα (sc. Stratoniceus) πάντας τοὺς τάφους ξενικοὺς ὄντας, “ἀπίωμεν” ἔφη “παῖ· ἐνταῦθα γὰρ οἱ ξένοι ἐοίκασιν ἀποθνήσκειν, τῶν δ’ ἀστῶν οὐδεῖς”.

T. 6. Archestratus ap. Ath. 320A:

σκάρον ἐξ Ἐφέσου ζήτει, χειμῶνι δὲ τρίγλαν
ἔσθι· ἐνὶ ψαφαρῇ †ληφθέντα Τειχιόεσση
Μιλήτου κώμη Καρῶν πέλας ἀγκυλοκώλων.

T. 7. Lebas-Waddington, 238 (found at Karakuyu): προφήτης Διονύσιος Ἀντιόχου φυλῆς Ἀκαμαντίδος δήμου Τιχισσέων. Cf. also *ibid.* no. 242.

T. 8. Steph. Byz. s. v.: Τειχιόεσσα, πόλις Μιλησίας. τὸ ἔθνικόν Τειχιόεις καὶ θηλυκὸν Τειχιόεσσα

¹⁹⁸ The localities are in fact largely named from the wells: Örtülü Kuyu, Kapaklı Kuyu, Tatlıkuyu, Yavankuyu, Yenikuyu, &c.

(‘Expectabam Τειχιόεσσιος’ Meineke, but the demotic seems in fact to have been (T. 7) Τειχι(ο)εσσεύς).

Previous attempts to locate Teichiussa seem to have concentrated unduly on proximity to Miletus and too little on that to Iasus and Caria. The inscriptions found at Karakuyu seemed to afford a valuable clue, and Teichiussa has been commonly located there. But it has been observed more than once that the ruins at Karakuyu consist of nothing more than a few pieces of medieval wall, and, moreover, that the persons mentioned are evidently *prophetae* of Apollo Didymeus who happen to be demesmen of Teichiussa; the inscriptions must have been erected at Didyma, whence they have been transported to Karakuyu. They therefore provide no clue to the situation of Teichiussa. ‘But (says the latest discussion, in *ATL* i. 553–4) the site has some intrinsic probability. Teichioussa was the naval base from which the Peloponnesians made their surprise attack on Iasus in 412 B.C., so that it evidently lay on the south coast of the Milesian promontory. The most fertile part of this south coast . . . is the neighbourhood of Karakuju, and Teichioussa, which supported a dynast in the sixth century B.C. . . . may reasonably be placed there.’ This appears to us somewhat uncritical. Thucydides (T. 3, T. 4) certainly proves that Teichiussa lay to the south of Miletus, but why necessarily on the south coast of the promontory? The whole of this promontory must surely always have been Milesian territory; it is difficult to see what a governor or dynast could be doing on the Milesian peninsula an hour’s walk from Didyma. In the tribute lists Teichiussa is entered on a par with Leros: it is Milesian, but not a part of the home territory. Add to this that Karakuyu has no trace of any early walled site, and only a poor harbour,¹⁹⁹ and it seems to us to have little or no claim to be seriously considered. No site, we think, west of Akbük has any real probability.

Kazıklı, on the other hand, answers admirably to the requirements. It forms a self-contained area, separated from Akbük by a moderate pass, and from its neighbour on the other side, Iasus, by a more considerable mountain tract. It is easily understandable that it should not have been fully incorporated in the Milesian state, but ranked, with Leros, as a Milesian possession. It is situated well and truly in the Iasic Gulf (which can barely be said of Karakuyu), and it has a beautifully sheltered harbour, protected against any wind that may blow.²⁰⁰ And above all it possesses, in the fortified hill of Doğanbeleni, the only early site yet discovered between Didyma and Iasus.²⁰¹ For its date the style of the masonry affords the only clue; the sherds give no help. In Scranton, *Greek Walls* 167–9, the dated examples of irregular trapezoidal are in the main fifth century; if our wall is so too, it may represent a reconstruction undertaken by the Milesians, who would certainly maintain the site as an outpost towards Iasus and Caria and a defence for their otherwise vulnerable south-eastern border. At the same time, Chares’ Teichiussa must, from its name, surely have possessed some notable fortifications; the wall at Doğanbeleni seems quite worthy to represent these, and if a sixth-century date can be accepted,

¹⁹⁹ A ‘naval base’ at Karakuyu is indeed little short of an absurdity. As a harbour Akbük Limanı is better, but far from good. The low ground to the west affords no protection against the prevailing north-wester, and in a south wind (according to local information) it is not uncommon for boats to capsize.

²⁰⁰ Under these circumstances it is surprising that of all the scholars who have previously visited Kazıklı not one seems even to have considered the possibility that this might be Teichiussa. Cousin and Deschamps, commenting (*BCH* xviii (1894) 21) on the inscription mentioned above (n. 197), observe that the occurrence of the *stephanephoros* Athenais ‘prouve que nous avons quitté le territoire de Milet pour celui de Iasos, où l’on connaît déjà la stéphanéporie

éponymique des femmes’. This, of course, does not hold good: the *stephanephoratos* is equally characteristic of Miletus. Von Diest (*Pet. Mitt.* 55 (1909) 268), though noting the good connexion with the sea, finds no clue to an identification. Robert (op. cit. 439), by a notable understatement, says that Kazıklı, ‘à l’époque impériale au plus tard’, certainly formed part of Milesian territory.

²⁰¹ On a low hill called Çamtepe, a little north of Doğanbeleni, are some rather scanty remains of a fort which may be of classical date: a wall of roughish polygonal about 40 metres long is preserved for one course above ground. The tombs of the type shown in *PLATE 22 f* are difficult to date. Everything else seems to be of the Roman period or later.

this is perhaps the more attractive view.²⁰² In any case it is clear that the region of Kazıklı has been, as would be expected, well populated from archaic times to the present day.²⁰³

INSCRIPTIONS

The inscriptions of Kazıklı hitherto discovered are almost exclusively epitaphs of Roman date. From Stratonicus' quip (T. 5) it might be expected that these would be largely of foreigners (cf. *ATL* i. 553, n. 2); they do not in fact confirm this expectation, but they are of course far removed from Stratonicus in date.

1. Kazıklı, in the floor of the porch of the mosque, a tombstone 0.51 m. high, 0.40 m. wide, thickness not ascertain-

able, with pediment containing a round shield or disk. Inscription in a frame below.

Εἰρηναῖ[ε]
χρηστὲ
χαῖρε

2. Kazıklı, now in the yard of the school, formerly built into a wall of the medieval fort north of the village, a limestone block 0.34 m. high, 1.43 m. long, 0.27 m. thick; inscription in an incomplete *tabula ansata* with the *ansae* turned inwards; dowel-hole at the right end. Letters

17–20 mm. high. Published, with some inaccuracies, by von Diest, *Pet. Mitt.* 1909, 268: cf. Quandt, *De Baccho in Asia Minore culto* (1913) 196–7 (*non vidimus*), Robert, *Ét. anat.* 478, n. 3.

αὐλακας εὐξέστοις ἐριβώλακας ΕΛΚΙΝΥ Ι Ο Ι Λ
ἡδ' ἀπαλὸν Βρομίοιο κατὰ δονακώδεος ὕλης
ἡμερίδος γλυκερῆς <σ>τῆσαι πολυανθέα βότρυν.
ὀκτωκαίδεκα δὲ ζωῆς βιότου λυκάβαντας
5 ἐκτελέσας στυγερῆς ὑπὸ νύκτερον ἤλυθα Λήθης.
τοῦνεκά μοι γοερὸν βάλε δάκρυον, ὦ ξέν' ὀδεῖτα·
ἀντὶ δέ σοι τούτων θεὸς ὄλβια δοῖεν ἅπαντα

The first three lines are obscure, and Hiller von Gaertringen's translation (ap. von Diest, loc. cit.) gives no satisfactory sense. Hiller's first suggestion, that lines 1–3 and 4–7 belong to different inscriptions, cannot be maintained: there is no trace of an erasure and no change in the script.²⁰⁴ His alternative is that the writer has prefixed to the epitaph (lines 4–7) three fine-sounding but meaningless hexameters borrowed from elsewhere.

The first difficulty is the reading in line 1. ΕΛΚΙΝ is beyond doubt; the remaining traces would suit ὀρότροις, and this word seems in effect demanded by the context, especially εὐξέστοις. ΕΛΚΙΝ can then only be the infinitive ἔλκειν, though the false quantity is ugly. It makes evidently a pair with <σ>τῆσαι. 'To draw the rich furrows with polished ploughs' is well enough; but what of lines 2–3? 'To set up the soft fruitful cluster of the sweet vine of Bromius beneath the reedy wood' is not easily intelligible; in particular, why a reedy wood? We have wondered if this may be a poetic expression for a 'forest of canes', that is, a bamboo trellis on which the vines were trained. στήσαι βότρυν κατὰ ὕλης then means to erect a trellis beneath which the clusters hang. But we offer this explanation with all reserve. The infinitives must

²⁰² The similar wall at Emecik on the Cnidian peninsula (Maiuri, *Ann.* iv–v. 403, fig. 8) is dated to the sixth century by the carvings on it (*BSA* xlvii. 172 f., pl. 39 a); cf. also the bit of the old acropolis wall bedded on the rock at Neandria (Koldewey, *Neandria* 11, fig. 9, at point 'a', not 'd', on the plan).

²⁰³ For the red mullet of Teichiussa (T. 6, τριγλαν) we cannot speak, as the modern inhabitants are little interested in fishing. The centre of piscatorial activity at present is the *dalyan* near Küllük, where an abundance of all kinds of

fish, including mullet, is caught. We are not very clear what is implied by the epithet ψαφαρῆ. As denoting a poor sandy soil it is hardly appropriate: the plain of Kazıklı, despite the absence of running water, is fertile and supports many kitchen-gardens; the water-table is little below the surface and wells are easily dug. Probably ψαφαρῆ is no more than a poetic epithet alluding to the position of Teichiussa by the shore: see LSJ s.v.

²⁰⁴ The difference in the form of *omega* observed by von Diest does not in fact exist.

apparently be taken as imperatives, and the general meaning is that while individuals live and die the work of the world must still go on: the alternative is to suppose that higher up on the monument there was a hexameter line giving the particulars of the dead youth and ending, for example, ἐὺ εἰδώς. The other peculiarities—νύκτερον without a noun and the ungrammatical θεὸς δοῖεν—are of less account; Mr. A. H. Coxon points out to us that this seems to be the first actual occurrence of κατὰ as a preposition.

3. Kazıklı Iskelesi; in the steps of the customs-house, a tombstone 0.57 m. high, 0.42 m. wide, 0.11 m. thick, with pediment containing a shield or disk. Letters 4 cm. high.

Εὐάρεστε
ἦρωσ
χρηστὲ
χαῖρε

4. Körekli, half a mile north-east of the Iskele; at the mouth of a well, a block 0.39 m. high, 0.79 m. wide, 0.28 m. thick. Letters 25 mm. high at the top, decreasing to 18 mm.

Copied as night was falling; no squeeze or photograph, but we believe the copy to be reliable.

Ἀπολλωνᾶς, Ἄρας ζῶντε-
ς ἐποίησαν καὶ φρονοῦντες.
οὐδενὶ δὲ ἐτέ(ρ)ῳ ἐξὸν τεθῆναι
ἢ αὐτοῖς καὶ Κόσμῳ καὶ Ἄραδι
5 καὶ Ἐλευθερίῳ
μήσει τῷ προγεγ
τις θεθῆναι ἐπεὶ δῶ

chiselled
away

L. 3. ΕΤΕΩ lapis.

Ll. 5-7. The normal formula seems to be confused here. Perhaps restore something like: [ἄλλος δὲ οὐ τολ]μήσει τῷ(ν) προγεγ[ραμμένων] τις θεθῆναι, ἐπεὶ δῶ[σει τῷ ταμείῳ *...]. For ἄλλος with genitive = 'other than' cf. ἕτερος αὐτῶν in *Reisen* ii. 51, no. 90 (Simena in Lycia).

5. Erenler, a little inland from the village site (above, p. 108); lying beside a ruined tomb of very poor construction is a marble block cut into the form of a throne; total height 0.92 m., width 0.59 m., thickness 0.40 m.; the seat is 0.38 m.

high, 0.31 m. from front to back. Inscription on the back-rest, in a sunken panel 0.37 m. high by 0.44 m. wide. Letters 16-18 mm. high. Squeeze, PLATE 23 d.

ὁ σὸς πατήρ σοι ΤΕΡΓΟΔΑΙΕ, τέκνον, λαλῶ·
Ποσιδώνι', ἀγήρως ὅδε νέκυς κεῖσθαι τάφῳ.
ὥς δεινόν· ἄρμοσθεῖς γὰρ ἕξ μῆνες κόρη
ἦν Δημάριν Μοῖραι μυχοῖσιν ἐξέπεμ-
5 ψαν ἄσπορον ~ εἶτ' Ἐρεινύες ~ κείμαρμένη
νέον σε μηδ' ἄλλοις πόθοις μιγέντα
εἰρύσαντο αὐθις ἐκ βίου ~ γεωργὲ ἡδύμοχθε,
φιλόπονε, πολύνου, παντὶ δὲ εὐτακτος φύσει,
ἐμὲ τοῖς πόννοι(ς) κατέλιπες ἀπολιπὼν φάος.
10 λαμπρὰ δὲ χώρης δεσπότῃ βίου χαρὰ τύμβῳ
τεθῆναί με, ἄν θάνω, μετὰ τοῦ τέκνου

This rigmarole, for all its faults, is not without pathos. The monument itself is by no means inexpensive, and consorts ill with the wretched quality of the tomb. The stone is good, and the inscription is carefully cut.

L. 1. ΤΕΡΓΟΔΑΙΕ (or possibly ΤΕΡΓΟΛΑΙΕ) is unintelligible to us. The father's name would be

expected. Ἐργοδαῖς might conceivably stand for Ἐργοδαῆς (a name which would suit the general context), but τε is unwanted and meaningless.

L. 2. ἀγήρως apparently in the sense 'that never came to old age'.

L. 3. μῆνες. Acc. plural in -ες (as in modern Greek) is common enough at least from the second century A.D. The participle ἀρμυοσθεῖς remains as a *nominativus pendens*.

L. 4. Δημάριν, i.e. Δημάριον. The first two words of this line are *extra metrum*, as also are εἴτ' Ἐρεινύες in line 5 and γεωργέ ἡδύμοχθε in line 7; in the two latter cases the words in question are marked off on the stone by the sign ~. Otherwise, apart from one or two cases of hiatus, and the false quantity in Ποσιδώνι', the metre is very respectable.

L. 6. i.e., still young and not having married a second wife (and hence childless). For μηδέ in place of οὐδέ with the participle (a tendency which begins in the Hellenistic period and grows steadily commoner) cf. no. 6.

L. 9. ΠΟΝΟΙ lapis. The meaning would appear to be 'by dying you have left me to labour (alone)'; but perhaps 'you have left me to grieve' was intended.

Ll. 10-11. We understand: 'the (only) bright joy in the life of the master of the land (i.e. the only hope left to me in life) is that when I die I should be buried with my son.'

6. İçme Su, a little to the south-east of the Iskele, about 50 m. from the shore, on a low hill which has been a cemetery, a limestone block broken into two parts, 0.45 m. high, 0.48 m. wide, 0.23 m. thick. Letters 25 mm. high.

κεῖμαι ΜΗΙ ~ΟΙ [- -]
 χρηστὸν βίον ἀνθ[ρῶ]-
 ποισι.
 χαίρετέ μοι, πάροδ[οι],
 5 καὶ χαίρειν πέμπε-
 τε πάντες

L. 1. Apparently μηκέθ' ὄρ[ων]. For μή in place of οὐ cf. no. 5.

Ll. 5-6. Presumably 'send me your greetings', a form of expression unfamiliar to us. The absence of the dead man's name is remarkable, even in a verse inscription.

7. Ibidem, a similar block broken in three pieces, 0.63 m. high, 0.43 m. wide, 0.28 m. thick. Inscription in a frame. Letters 25 mm. high.

ἡσυχίη κατέχι με τὸν
 Εὐτυχον, ᾧ παροδεῖται, Φ
 τὸν πολλοῖς ἀρέσαντα φί-
 λοις ἰδίοισι τε πᾶσι, Ψ
 5 ὃς βεβίωκα καλῶς, ὦν Χ
 χρήσιμος ἐν πολλοῖς Ζ

The text is certain, but the isolated letters at the right are obscure. It had occurred to us to wonder if they might be Christian symbols, e.g. φ(ῶς) ψ(υχῆς) Χ(ριστός) ζ(ωή), but Prof. Calder very rightly points out to us the strong Epicurean flavour of the epigram, which must tell against a Christian interpretation. ψυχή also does not appear to belong to the normal Christian symbolism. Prof. Calder was disposed to conjecture that these letters may be a form of protective abracadabra, like the ΖΛΧΝΘ of *MAMA* vii. 338, which is also marked as Epicurean by the formula ὁ βίος ταῦτα. In l. 6 πολλοῖσιν would have improved the metre.

8. Örtülü Kuyu, among the house-ruins, a tombstone top and on the right, but the inscription is complete. 0.46 m. high, 0.37 m. wide, 0.14 m. thick, broken at the Letters 15-20 mm. high.

Εὐτέρπη
 χρηστή, χαί-
 ροις παρὰ πᾶσι

βροτοῖσι· τρὶς δέ-
 5 κα ἑτῶν καὶ ὀκτῶ
 ἔτελεύτας, τέκνα
 λιποῦσα καὶ πό-
 σιν ἐλ λύπαις· οὖ-
 τω τάδε Μοῖρα ἐ-
 10 πέκλωσε

9. İlmin Köyü; at the house of Mehmet Yıldız, a tombstone broken in two pieces; the larger portion is now hidden in a wall; on the other are the letters

ΓΤΗΛ

Perhaps [χρη]στή χα[ῖρε].

10. İlmin Köyü; at the coffee-house, from a field below the village, a block of dark-grey stone broken on all sides: present measurements 0.32 × 0.26 × 0.26 m. (thickness complete).

[τ]οῦτο τὸ [μνημεῖον κατε]-
 [σ]κεύτσε Ἑκατ[ων - - - -]
 [.]ωνος αὐτῷ [καὶ τῇ γυναικί]
 [α]ὐτοῦ Εὐτυχί[α? καὶ τῷ υἱῷ αὐ]-
 5 [το]ῦ Ἑκατωνύμ[ω καὶ τούτου]
 [γυ]ναικί τε καὶ τ[έκνοις πᾶσι?]
 [καὶ ἐκ]γόνοις καὶ [- - - - -]

11. Kapaklı Kuyu; in the garden of the house near the well, a funeral altar 0.68 m. high, 0.32 m. wide, 0.34 m. thick. Letters 20–25 mm. high, much worn.

Νεικάρην χρηστήν χαῖρε
 Ἀντίοχε χρηστὴ χαῖρε
 Ἐρως [χρ]ηστὴ χα[ῖρε]

12. Yavankuyu (Bozbük); near the well, lying in the open at the foot of a knoll, a pillar of grey marble 1.14 m. high, 0.28 m. wide, 0.23 m. thick, with a round base-moulding on top; small square hole in the upper surface. A groove 0.10 m. wide and 0.0275 m. deep runs down the right side from top to bottom. Top right-hand corner broken away. Inscription at the top in letters 18–20 mm. high; lines 2–3 badly worn. Photograph, PLATE 23 e.

[Φ]ωκᾶς [ὑπὲρ σω-]
 [τ]ηρίας αὐ[τοῦ κέ]
 [τ]αντὸς τοῦ ο[ἴκου]
 αὐτοῦ ἐκαλί[έρ-]
 5 [γ]ησε τὰ κακέλια.

L. 5. i.e. τὰ καγκέλλια, a balustrade fitting into the groove in the side of the stone.

13. In the plain about 500 m. west of Doğanbeleni; at the well in the garden of İsmail Ordukaya, a damaged block broken on the right and at the bottom; top and left edges apparently original, top left corner broken away; height 0.31 m., width 0.47 m., thickness 0.35 m. Good regular letters of the first or second century 16–17 mm. high, but much worn.

[- - - - -]ο[- - - - -]
 [- - - -]του Εὐτύχ[ου? - - - -]
 [- - e.g. νοτ]άριος Ἰουλίας Τ[- - - -]
 [- - -]ης ἐα[υτ]ῷ τε καὶ [γυναικί]
 5 [καὶ] το[ῖς ἐσ]ομένοις [αὐτῶν τέ]-
 [κν]οις καὶ τέκνων τέκν[οις - - -]
 [- - - - -]ου Εὐτύχο[υ - - -]
 [.]ενων αὐτοῦ καὶ ἀδελ[φ - - - -]

14. Yenikuyu; at the house of Mustafa Aydoğdu, a block of white stone broken on the left, 0.55 m. high, 0.34 m. wide,

0.29 m. thick. Simple moulding at top and bottom. Inscription at the top in irregular letters up to 35 mm. in height.

-- ν 'Ερωτιά[νόν]

-- ΝΟΥΤΑΡ/. . .

-- ΙΑΘΑΙΤΟ. . .

vacat

L. 1. Less probably νεγωτιά[τωρ].

14a. According to information supplied by a villager, at a spot on Ilbıra Dağı (Grion) above İlmin Köyü, the following letters are carved on the natural rock:

ΗΧΟΧΓ

? 'Ηχοῦς

The letters are said to be cut in relief, with gold colouring, below a pattern of curly lines. The villager was not willing to show the spot; his information must be taken for what it is worth.

15. On the upper road from Yoran to Akbük, two hours from Yoran and fifteen minutes from the junction of the roads near Mercimek; in a deserted region of scrub, a grey limestone block 0.92 m. high, 0.46 m. wide, 0.32 m. thick, rough-picked all over except for a space at the top

which has been smoothed for the inscription. Letters of the fourth century B.C., 18–23 mm. high. Published by Cousin and Deschamps, *BCH* xviii (1894) 19, no. 6; Haussoullier, *Rev. phil.* xx. 95; Michel no. 803.

[ῶ]ρος τεμένου[ς]

Ἀπόλλωνος

Πιδανασσέως

The reading in line 3 is quite certain, and confirms the form Πιδανασ(σ)εύς as in *CIG* 2862, as against the commonly received Πεδανασσεύς.

As the stone stands at present the inscribed side faces north, but it was apparently moved when it was dug out a few years ago, and no reliable indication is afforded as to the location of the precinct.

16. Akbük; from a garden in the village, a small block of dark heavy stone 0.25 m. high, 0.27 m. wide at the bottom,

tapering to 0.24 m. at the top, 0.08 m. thick. The left side has been cut away, apparently with a saw. Letters 4–6 cm. high.

[-- --]ΕΕ ΧΡΗ-

[ΣΤ]Ξ ΧΑΪΡΕ

Some name like [Τιμόθ]ΕΕ may be restored in l. 1.

17. Mercimek, Yanık Yer; in a late building containing unfluted column-fragments and other cut blocks, a slab of dark stone similar to no. **16**, 0.50 m. high, 0.33 m. wide,

0.08 m. thick, but not properly squared; surface rough at back and front; chipped at top and both sides. Letters 35–45 mm. high.

[Α]ὐρηλεία Ç[. . .]

[.]α χρηστή χαῖ[ρε]

L. 1. Last letter Ε, C, or Θ.

Note. After the above was written, and following the brief announcement in *Anat. Studies* vii (1957) 24 of the location of Teichiussa at Doğanbeleni, L. Robert has published (*Rev. phil.* xxxi (1957) 7–22) an account of his investigations around Kazıklı in the year 1934. Rather than rewrite this section of our article, we have preferred to leave it exactly as it was written; the two accounts of researches undertaken in the same area at an interval of twenty years are not without interest. Robert, it appears, saw the site at Doğanbeleni (how did he fail to recognize its identity?), noting traces of five or six towers against our four; he also saw our inscription no. **11** at Kapaklıkuyu, reading Ἀντί[ο]χ[ο]ς where we have Ἀντίοχς, and he republishes Von Diest's epigram, our no. **2**, with a text and interpretation virtually identical with ours. For the rest it

seems that the inscriptions seen by Bean were not seen by Robert, and vice versa; this may afford an indication of the rapidity with which ancient stones are appearing and disappearing in the Turkish countryside. We also note that E. Kirsten, in his new *Die griechische Polis als hist.-geogr. Problem* 79, draws attention to the uncertainty of the situation of Teichiussa, and suggests that in its origin Teichiussa may have been an outlying Milesian fort.

ISLANDS OFF THE WEST CARIAN COAST (FIG. 14)

We conclude our description of the Carian coast with some notes on the adjacent islands. We have not landed on Syme; the ancient settlement there, like the modern town, was in the north-east part of the island.²⁰⁵ Pserimos in the Kalymnos strait and Çatallaradası (Karabağlar), Konelada (H. Apostoli), and Salihadası (Tarandos) off the coasts of the Halicarnassus peninsula have been described previously.²⁰⁶ The population of these islands at the present day presents anomalies. Cos, like the neighbouring Cnidian peninsula, is not intensively cultivated or densely populated. On the other hand Syme and Kalymnos, together with Khalke, are the important centres of a widespread sponge-fishing industry and have a much greater population than the natural resources of the islands could warrant. There seems to have been considerable settlement of the small desert islands by Greeks in the nineteenth century; and though those close inshore are now again deserted or used only for seasonal grazing (as some of them may also have been in antiquity), Pserimos and Lipsoi still support, or at least possess, populations of some hundreds.

TELOS

Telos, the island of Erinna, lies 12 miles south of Cape Krio (Cnidus). It has a declining population, now said to be 1,050; and its principal product is almonds. Traces of terraces on the mountain slopes suggest that the island was once better cultivated than it is now. The antiquities of the island were investigated by Dawkins and Wace, to whose excellent description little can usefully be added.²⁰⁷ The ancient town was in the north of the island at Megalokhorio. The acropolis crowned a hill which towers above the exposed anchorage of Plagio, but the town itself descended the southern slope away from the sea and the summer wind; the masonry of the fortifications and terraces varies in style, but would seem in general to be of about the first half of the fourth century B.C. PLATE 24 *a* shows the well-preserved piece, apparently of the lower circuit, in the modern village.²⁰⁸ The acropolis is of great natural strength and well chosen for a garrison position; it is presumably this that is referred to in the Coan arbitration of the beginning of the Hellenistic era, which administered an oath to the citizens to abide by the democracy and not countenance the seizure of the ἄκρα;²⁰⁹ the bronze coins, which the Telians struck about this time, show the Coan device of a crab on the reverse, and the legend ΔΑΜΟΚΡΑΤΙΑΣ is found on the obverse.²¹⁰ A gold treasure was recently discovered in the cemetery below the town. On the town site we noted late red-figured pottery, bell-crater rims, and black glaze of the fourth century perhaps going back into the fifth.²¹¹ There seems to have been very little

²⁰⁵ Cf. Hamilton, *Researches* ii. 70; *Med. Pilot* iv; Ross, *Reisen* iii. 123 ff.; M. Gregoropoulos, 'Η Νήσος Σύμη (Athens, 1877) 8; Khaviaras *Öjh* vii. 87. The 'trophy', Maiuri, *Ann.* iv-v. 456 f.

²⁰⁶ *BSA* l. 128, 131 f.; for Salihadası see also above, p. 97, n. 151. For Karaada and Orakada see the references *BSA* l. 134. For Syme, Telos, Nisyros, and other islands in their relationship to Rhodes see *Peraea* 138 ff.

²⁰⁷ *BSA* xii. 159 ff., with bibliography 151 f. Some views,

Ann. ii. 13 ff. A history of the island is being prepared by Mr. Anagnostides.

²⁰⁸ This is the same stretch as Dawkins-Wace's fig. 9.

²⁰⁹ Herzog, *Riv. Fil.* 1942, 15 (there dated c. 300 B.C.).

²¹⁰ See Robert, *Rev. phil.* lx. 46.

²¹¹ The small vase seen by Ross (*Reisen* iv. 44), with birds and palmettes on a pale ground, might well be of an earlier date.

occupation, if indeed any, on the town site before that time; and in fact Telos gives the impression of only having become a political entity in classical times. Superficial examination of a site



FIG. 14. ISLANDS OFF THE WEST CARIAN COAST

can of course be deceptive; but it is perhaps not coincidence that Telos does not appear in the tribute lists until 427/426 B.C.²¹² It seems to have been flourishing from the fourth century B.C.

²¹² When L. Robert speaks of independent Telos being attested from the middle of the fifth century (op. cit. 48) he evidently has this date in mind. The only earlier mention known to us is that in Hdt. vii. 153 to a Telian, the ancestor of Gelon, who joined in the Lindian foundation of Gela.

until medieval times; an Early Christian basilica has recently been noted at the head of Livadia bay near the ancient fort there.

NISYROS

The island lies 10 miles off Cape Krio and about the same distance from Kephalos bay in Cos. It is circular, with a volcano in the centre, and is relatively fertile. Its present population is

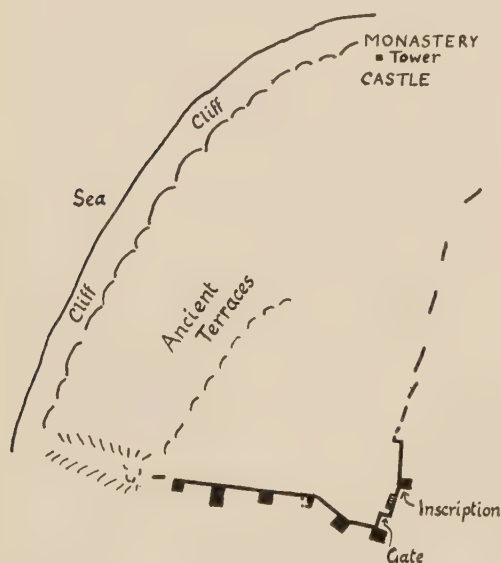


FIG. 15. NISYROS: ROUGH SKETCH-PLAN OF THE FORTRESS

about 3,000, but was 4,300 in 1912. The ancient city was on the north-west point of the island above the modern town of Mandraki. The fortifications on the hill have been described and illustrated by Dawkins and Wace, who give a plan of the south-east corner with its recessed gateway and stairways leading up to the parapet.²¹³ The wall here, preserved almost intact and defended by frequent towers about 9 m. square, is 3.70 m. thick and constructed in more or less regular trapezoidal masonry.²¹⁴ We give a very rough plan of the circuit (FIG. 15), together with photographs of the masonry and of the stairway and gate from the north (PLATE 24 c, b). The highest part of the hill is in the south-east part of the perimeter. The wall on the south overlooks a little ravine. The fifth tower from the corner has been built out later in header-and-stretcher masonry, and the thickness of the curtain here is 3 metres. Farther west a sharp arête, which runs down the slope to the sea, provides a secure defence. The whole seaward face of the site is protected by a high cliff above the shore. The

east side of the circuit lines a crest with a valley on its east. The wall line becomes difficult to trace as one descends the ridge to the north. It might be expected to continue to the rocky eminence now crowned by the ruins of the medieval castle; but it appears rather—on superficial examination—to be diverging to the north-east as though to enter the lower ground on the east of the castle, possibly to take in a small anchorage.²¹⁵ Inside the circuit there are traces of stout terrace walls on the slopes between the high part in the south-east and the cliff above the sea; but we could not recognize the line of an inner perimeter, and do not know whether the high south-eastern part was walled off from the rest of the circuit to form a citadel.

At the junction of the first tower to the north of the gateway an inscription (PLATE 24 d) is carved on the exterior face of the curtain and tower in letters 7–11 cm. high; it reads:

δαμόσιον τὸ χωρίον πέντε πόδες ἀπὸ τοῦ τείχε[ος].²¹⁶

Both Hiller and Dawkins-Wace date the inscription in the fourth century B.C., and we should

²¹³ *BSA* xii. 165 ff. To their bibliography, p. 152, may now be added Papadopoulos, Γενική γεωγραφική καὶ ἱστορική Περιγραφή Νισύρου (Nisyros, 1909); and Gerola on the medieval antiquities, *Ann.* ii. 20 ff.; for the geology and geography of Nisyros and Cos see Plieninger and Sapper's article (in four instalments) in *Pet. Mitt.* 1920 (with 1:75,000 map and views, pls. 28–30).

²¹⁴ Farther away from the gate the masonry of the curtain is less regular, especially in the upper courses. The great

thickness may have been intended to give added resistance against the frequent earthquake shocks.

²¹⁵ There is now no natural harbour at Mandraki; on the question of the ancient one see Ross, *Reisen* ii. 72 f.; *BSA* xii. 169 f.; *Pet. Mitt.* 1920, 216.

²¹⁶ *IG* xii. 3. 86 (with drawing; the last two letters in πόδες are in fact stepped up towards the beginning of the next word, and are clear); *BSA* xii. 167.

place it in the second half of that century, very probably in the third quarter. Dawkins and Wace noted that the style of building changes to the south of the inscription and considered the gate section to be later than the rest. The change of style, however, does not seem very significant here—the masonry of a circuit is usually at its best at the main entrances; and the wall north of the tower with the inscription still keeps the normal thickness of 3.70 m. We therefore believe that the inscription provides a *terminus ante quem* for the whole south-east part of the fortification, if not for the circuit generally.

Sherding is good on the east flank under the crest. The surface pottery includes fragments of Orientalizing and striped wares (perhaps going back into the late seventh century), of bell-craters and Red Figure, black glaze of the fifth and fourth centuries, Hellenistic wares and sigillata; and in a field on this slope there were recently discovered a strong-style terracotta head, a marble head in Praxitelean style, classical and Hellenistic vases, and Hellenistic terracottas.²¹⁷ On this slope lies a marble base honouring Euthraptidas, who served in the *aphrakta*.²¹⁸ Across the valley here the Italians excavated a cemetery in 1932. It contained burials of classical and Hellenistic date, and Roman tombs with sculptured funerary altars. But more notable was a series of cremations with archaic pottery which seems to start about the end of the seventh century; much of the pottery is decorated in a wayward Orientalizing style which seems to have lingered on into early classical times.²¹⁹ Among other antiquities of Nisyros are sculptures (including good grave reliefs from the cemetery area)²²⁰ and terracotta figurines.²²¹ The city seems in fact to have enjoyed considerable prosperity in ancient times and beyond; there appear to be remains of several Early Christian basilicas. Ross described a fortification (Stavros or Argos) on the east of the rim of the crater and a millstone quarry on the beach below Nikia.²²²

Nisyros belonged to the despotate of the elder Artemisia. But in the Athenian tribute lists, unlike Cos, it appears in the Ionic as opposed to the Carian panel;²²³ this singular classification is likely to have a historical cause and may reflect an earlier emancipation from the despotism. The name Nisyros has a surprising distribution. There was once, according to Strabo (x. 489), a city of Nisyros on Carpathus. There was a *genos* of Νισυριάδαι on Cos.²²⁴ There was a Νισυρέων κατοικία in Lydia, with a worship of Apollo Nisyreites.²²⁵ And—for what it is worth—Pliny mentions a town of Nisyros on the island of Calydne (n. 298 below). From epigraphical testimonies also it appears that Nisyrians were active outside their island. It seems not impossible that the people of Nisyros may have formed external connexions through emigrants from the island in times of seismic activity.

COS

Cos is a relatively large island. From the modern town (on the site of the Hellenistic city) at the north-east end of the island to Kefalos in the south-west is a journey of over 40 kilometres. Habitation on the island conveniently groups itself in a number of big villages, while the economy of the island is capable of maintaining in addition an urban population of some thousands. Kefalos, fronting the serene bay of Kamares where the caiques lie snugly at anchor during the melon season, is separated from the rest of the island by a narrowing isthmus of 'porselana'; it is

²¹⁷ We saw no prehistoric ware, but a headless marble idol of Cycladic type in Berlin is reported to have come from Nisyros (*Ant. Skulpt. Mus. Berl.* no. 575).

²¹⁸ *AE* 1913, 9 f.

²¹⁹ *Clara Rhodos* vi–vii. 471 ff. Cf. now Schiering, *Werkstätte orientalisierender Keramik auf Rhodos* 22 f.

²²⁰ *Ibid.* 550 ff.

²²¹ e.g. Mollard-Besques, *Cat. raisonné* C126–8, pl. 76.

²²² *Reisen* ii. 79 f. Brock's report on the towers on the adjacent islet of Pyrgoussa, *ibid.* 68; Plieninger and Sapper report towers on Pyrgoussa, Pakhia, and Strongyli (*Pet. Mitt.* 1920, 196 f.).

²²³ Except in list (25–)26, where it is Nesiotic.

²²⁴ In an inscription of Halasarna, Paton-Hicks, *Inscriptions of Cos* 249 (no. 368, vi. 39), 257.

²²⁵ *RE* s.vv. Nisyreites, Nisyros (4).

healthy, and has an air of remoteness not disturbed by the post-war holiday camps. Paton remarked of the inhabitants of Kefalos that they 'are distinguished from the other Coans by their strength, industry, independence and virtue, but they are all exceedingly illiterate'—hence the loss of numerous inscribed marbles, which 'usually go into the lime-kiln'.²²⁶ On the plateau towards the middle of the island sprawls the threefold farming village of Antimakhia, whose name, attested in the fifteenth century by Buondelmonti, is evidently a survival from antiquity; and to the south-east of this is the fertile but ill-watered plain of Kardamena. The eastern half of the island consists of a mountain ridge, which drops sharply to the southern coast, but slopes more gently to a broad coastal plain on the north; on its northern slopes are two large, scattered villages (Pyli and Asfendiou). At the north-east end of the island is the fertile region of the modern town. The town, with its environs, has a population of 8,730, Asfendiou of 2,725, Pyli 2,180, Antimakhia 2,125, Kardamena 1,450, Kefalos 2,040; the total population of the island is about 19,250.²²⁷ If the urban population is left out of account, it can be seen that the island naturally divides itself into about half a dozen roughly equal village districts. This division closely resembles that which seems to have prevailed in Hellenistic-Roman times. The three south-western districts correspond to the ancient demes of Isthmus (at Kefalos), Antimachidae (with Aegeli and Archiadae), and Halasarna (at Kardamena); the modern town is on the site of the Hellenistic city: only the belt on the north side of the mountain ridge seems in antiquity not to have been divided into two demes, but into three (Hippiotae, Halentii, Phyxiotae).²²⁸

The outstanding event in the known history of ancient Cos was the removal of the city of the Coans to the site just south of Cape Skandarion, which faces across the narrow strait to the Termerian promontory and Halicarnassus. The *testimonia* for this removal are two:

Diodorus xv. 76, 2: ἀμα δὲ τούτοις πραττομένοις (i.e. 366/365 B.C.) Κῶοι μετόκησαν εἰς τὴν νῦν οἰκουμένην πόλιν καὶ κατεσκευάσαν αὐτὴν ἀξιόλογον· πλῆθος τε γὰρ ἀνδρῶν εἰς ταύτην ἡθροίσθη καὶ τεῖχη πολυτελῆ κατεσκευάσθη καὶ λιμὴν ἀξιόλογος. ἀπὸ δὲ τούτων τῶν χρόνων αἰεὶ μᾶλλον ἡϋξήθη προσόδοις τε δημοσίαις καὶ τοῖς τῶν ιδιωτῶν πλούτοις, καὶ τὸ σύνολον ἐνάμιλλος ἐγένετο ταῖς πρωτευούσαις πόλεσιν.

Strabo xiv. 657: ἡ δὲ τῶν Κῶων πόλις ἐκαλεῖτο τὸ παλαιὸν Ἀστυπάλαια καὶ ὤκειτο ἐν ἄλλῳ τόπῳ ὁμοίως ἐπὶ θαλάττῃ· ἔπειτα διὰ στάσιν μετόκησαν εἰς τὴν νῦν πόλιν περὶ τὸ Σκανδάριον (MSS. Σκανδύλιον, Σκάνδαλον) καὶ μετόνομασαν Κῶν ὁμωνύμως τῇ νήσῳ.

Both writers tell us that in historical times the Coans removed their city to the known later site. Diodorus admittedly does not speak of an earlier city, but his use of the verb μετόκησαν implies that there was one; Strabo gives the name of the earlier city—Astypalaia. Diodorus gives the date—366/365 B.C. The two testimonies are precise and consistent, and fit the archaeological evidence for the existence of a major Hellenistic city by C. Skandarion; their historical correctness has not until very recently been challenged.

One further piece of information may perhaps be gleaned from Strabo's notice: properly speaking, when the geographer says that the name of the site at C. Skandarion was changed to Κῶς, he implies that the place was previously known under another name.²²⁹ The evidence for

²²⁶ Paton and Hicks, *Inscriptions of Cos* (1891) 285.

²²⁷ These figures are quoted from D. Hatzeamalos, *Kōs, τὸ νησί τοῦ Ἱπποκράτους* (Athens, 1952). In 1843 Ross estimated the population of the island at 7,000–8,000 (*Reisen* iii. 126).

²²⁸ The island is shown apportioned among the six demes and the city area in maps (Paton-Hicks, *op. cit.* at p. 1; *Memorie* i, in folder); there is of course no absolute certainty that all these demes, and only these, were flourishing at any

one time. Cf. A. N. Modona, *L'isola di Coo (Memorie* i) 22 ff.

Sapper and Pleninger published an excellent map of Cos (see above, p. 118, n. 213); the Italian map used in *Memorie* i is printed much more legibly in *Historia* v (1931) at p. 604.

²²⁹ The older name might, in theory, have been Skandarion; but C. Skandarion in fact retained its name, and there is no reason to suppose that it was ever the name of an inhabited site.

an inhabited site here, thanks to the investigations and discoveries made since the disastrous earthquake of 1933, is now considerable. There was a Mycenaean settlement at the brow of Seraglio just inland from the harbour, with a rich cemetery (and possibly also habitation) of Geometric times.²³⁰ Burials were also made in the town area in classical times. A fragment of a late archaic symposium relief, an early stele of a boy athlete and fragments of a funerary epigram of c. 500 B.C. have come to light;²³¹ and in the town also a fragment of an Athenian copy of the mid-fifth-century Athenian monetary decree was found.²³² In the outskirts Herzog excavated a fountain-sanctuary, in whose basin he found a fragment of a dedication to Demeter and vases and terra-cottas ranging from the late sixth or early fifth century on;²³³ and he discovered a mid-fifth-century *horos* of Pythian Apollo.²³⁴ To the west, ten minutes from the sea and perhaps half an hour from the town, Paton saw a classical *horos* of Athenian Athena (Ἀθηνᾶ Ἀθηνῶν μεδέουσᾶ) built into a well.²³⁵ The classical settlement at this end of the island, whether large or small, seems to have been distinguished in its cultural tradition. The inhabited site itself has not been found. We made a careful examination of the ground about the foot of the hills behind the town, starting at the Asklepieion and ending at the beach east of the town, and found no classical site;²³⁶ we therefore suppose that it must have lain within the limits of the modern town, that is to say on the site of the Hellenistic city. The position of the Geometric cemetery seems to support this view.

The name of the settlement here before 366 B.C. is not in doubt. Thucydides refers to a place Κῶς ἡ Μεροπίς and Diodorus to Meropis. Dedications were made at Olympia by victors ἐκ Κῶ τῆς Μεροπίδος,²³⁷ and the outside world seems for a time to have known the new city of Cos by this name.²³⁸ The new city is thus shown to be the successor on the ground of Cos Meropis. The earliest recorded historical reference to Meropis is in 412 B.C., when the Spartan admiral Astyochus, finding Cos Meropis without fortifications and shattered by earthquake, sacked the city and ravaged the land;²³⁹ soon after this the Athenians were using Cos as an advanced post for operations against the Spartans in Rhodes.²⁴⁰ In 410 B.C. Alcibiades levied money from Halicarnassus and fortified Cos, establishing an archon there;²⁴¹ there can be no doubt that the reference here is to Meropis. In 408 B.C., crossing the Aegean with the Athenian fleet, Alcibiades ravaged Cos and Rhodes, and in the following year Lysander put in at Rhodes, Cos, and Miletus.²⁴² Presumably Meropis was at this time occupied by the Athenians but the rest of the island was favourably disposed to the Spartans. To these years Hicks attributed the *horos* of Athenian Athena, surmising that the Athenians were planning to send a cleruchy to Meropis.²⁴³

Astypalaia lay in the vicinity of Kamares bay at Kefalos. The survival of the name Stampalia there²⁴⁴ removes the necessity of considering the alternative locations that have been proposed.

²³⁰ Morricone, *Boll. d'Arte* 1950, 320 ff.; for the Proto-geometric pottery see Desborough, *Proto-geometric Pottery* 222 ff. Mycenaean tombs have also been reported at Langada somewhere to the south, and Mycenaean finds at the Asklepieion (cf. Morricone, op. cit. 323, 327).

²³¹ The symposium fragment, *Clara Rhodos* ix. 73 f., pl. 6; the stele and epigram are mentioned *ibid.* 80, 177.

²³² *Ibid.* 151 ff.; see below, pp. 124 f.

²³³ *AA* 1901, 134 ff.

²³⁴ *Koische Forschungen* (1899) 69, no. 36, pl. 2. 1.

²³⁵ Paton-Hicks, op. cit. no. 148.

²³⁶ Tile fragments, Hellenistic amphora sherds, and sigillata may be picked up at many points; we found classical coarse wares and black glaze of the first half of the fourth century on the flat crest east of the Asklepieion, but the site was in any case not that of a substantial settlement.

²³⁷ Paus. vi. 14, 12; cf. Lippold, *RE* s.v. Philotimos (4).

The sculptor Pantias seems to be late fifth-century, but the dedication read by Pausanias may have been inscribed later than 366 B.C. See now Amandry, *Charites* (*Studien zur Altertumswissenschaft*) 66, 83.

²³⁸ The mention of 5,000 cities of India, of which none was smaller than Cos Meropis, goes back to one of the companions of Alexander the Great (see Hicks in Paton-Hicks, op. cit. li f.).

²³⁹ Thuc. viii. 41, 2.

²⁴⁰ *Ibid.* viii. 44, 3.

²⁴¹ *Ibid.* viii. 108, 2. Diodorus (xiii. 42, 3) says that Alcibiades sacked Meropis on this occasion; but Thucydides appears to have had no knowledge of this, and it may be an assumption on the part of Diodorus.

²⁴² Diod. xiii. 69, 5; Xen. *Hell.* i. 5, 1.

²⁴³ Paton-Hicks, op. cit. xxv f.

²⁴⁴ Adm. chart; Hamilton, *Researches* ii, map; Ross had

The exact site was fixed by Duncan Mackenzie in 1898 on a spur crowned by a chapel of the Panagia Palatiane; he gave a good description of the city-site and its environs.²⁴⁵ It happens—not surprisingly—that the Hellenistic deme of Isthmus, which was the successor of the old city at this end of the island and seems not to have lost all vestige of its old status,²⁴⁶ had its centre here also. Herzog in 1902 cleared the foundations of the ancient building on which the chapel of the Palatiane rests; and being apparently unaware of Mackenzie's observations, he seems to have thought in terms only of a temple of the deme;²⁴⁷ Laurenzi in 1928 excavated a Hellenistic temple and theatre, which he recognized as belonging to the deme, at a few moments' walk south of the Palatiane,²⁴⁸ and is said to have preferred a location of Astypalaia on the opposite side of Kamares bay, where (according to Modona) he discovered an unwall'd fishermen's settlement going back to the Geometric era; and by a crowning mischance Mackenzie was at the same time erroneously credited with an identification of Astypalaia at the other end of the island, with the result that the position of Astypalaia has become once again a matter for arm-chair speculation.²⁴⁹ The site is nevertheless unmistakable. The chapel of the Palatiane crowns the apex of a spur which projects from the mountain-side between two streams; it is the best part of half an hour up from the bay. A little distance below the chapel a stretch of good ashlar wall stands to a height of 3 metres or more (PLATE 25 c); it forms an angle at either end as though to enclose the summit as a citadel. The chapel appears on the crest of the spur in the right-hand part of PLATE 25 a.²⁵⁰ Beneath this the spur descends in superimposed terraces for a considerable part of the way down to the sea; at the foot of the terraces there is an apparent line of a circuit wall in rough polygonal or fitted rubble masonry, with the angle of a tower or bastion on a projecting rock. The sherds begin to thin out below this. If one imagines the terraces built up with plastered houses, the conical spur, when seen from the bay, would present a similar appearance to many of the towns of the archipelago at the present day.

Mackenzie commented on the archaic appearance of walling and surface pottery. The latter is abundant. Hellenistic and Roman wares are not lacking; but there is a high proportion of earlier pottery, and early sherds (including Geometric) and classical wares are found all over the site. The town was therefore a substantial one in early times. The earliest Hellenic pottery is Geometric, perhaps of the ninth century (cf. PLATE 25 b); we noted archaic striped ware and glazed ware with purple bands, red-figured bell crater fragments (PLATE 25 b, middle), and abundant black glaze of the fifth century and the first half of the fourth.²⁵¹ The classical pottery, though much more lavish, is strikingly similar in its range to that which we found on the Lelegian sites synoecized by Mausolus in the second quarter of the fourth century; and there can be no doubt that the city here at Kefalos flourished until about that time and was much diminished after the foundation of the new city of Cos in 366/365 B.C. It cannot be other than the Coan city of Astypalaia. Various relics of early Greek date have been reported in the vicinity, and D. Levi found traces of early Greek and classical cults at Kakiskala to the west and on the south in the

the name from Capt. Graves and conjectured that it was the ancient Astypalaia (*Reisen* ii. 89, iii. 136), but subsequently placed Astypalaia elsewhere (iv. 28). Mackenzie seems to have heard the name as 'Stympalia'; he found it applied at the ancient site; V. Bérard also speaks of the hamlet of Stampalia (*Les Phéniciens* i. 38).

²⁴⁵ *BSA* iv (1897-8) 95 ff. Cf. also Ross's description (*Reisen* iv. 23 ff.).

²⁴⁶ Cf. Segre, *Ann.* xxii-xxiii. 29.

²⁴⁷ *AA* 1903, 2 f.

²⁴⁸ *Historia* v (1931) 625 f.

²⁴⁹ For the references see *Memorie* i (1933) 19 f.; Modona

himself inclined towards Laurenzi's location. The specific identification that he attributes to Paton and Hicks (their p. xix) is a misunderstanding of the English. Cf. Morricone, *Boll. d'Arte* 1950, 322, where the position of Astypalaia is said to be unknown.

²⁵⁰ These two photographs, kindly provided (together with that of PLATE 25 c) by Dr. Wilder Penfield, were taken from the north; they are taken from slightly different positions and are partly overlapping.

²⁵¹ e.g. bolsals, and plates and stamped bowls of the first half of the fourth century.

Aspripetra cave (where the earliest Hellenic ware is again probably of the ninth century);²⁵² a harbour mole has been reported directly underneath the site. Of the inscriptions that have escaped the lime-kiln at Kefalos, two seem to be anterior to the removal in 366/365 B.C.²⁵³

Mycenaean is not entirely lacking at this end of the island; a few sherds, at least, were found in the Aspripetra cave.²⁵⁴ But the intensive occupation at Kefalos seems to have begun somewhere in the middle of Geometric times. The principal Mycenaean settlement seems, so far as finds up to date permit a judgement, to have been at the other end of the island at and around Meropis. The name Meropis is generally believed to belong to an earlier culture than the Dorian; and it is notable that in the Delian hymn to Apollo, which reflects with fidelity the Homeric tradition of a geography anterior to the Dark Age migrations, Cos is named as πόλις Μερόπιων ἀνθρώπων. It is hardly possible to doubt that the allusion here is to a pre-Dorian city at Meropis. The Hellenic settlement at Astypalaia, dating apparently from Geometric times, should then represent the Dorian immigration in Cos.²⁵⁵ Meropis, to judge by the gap in the archaeological evidence from the Late Geometric on, appears to have passed into a decline as the Doric element became dominant in the island; and Astypalaia at the remote corner of the island assumed the position of the sovereign city. The removal of this city, five or six centuries later, to the old site of Meropis is a link in the development which was forced on the Triopian Dorians after the collapse of the Athenian hegemony in the Aegean. Before this, no Doric city fronted on the sea-lane by which the shipping passed round the south-west corner of Asia Minor; absorbed in their own husbandry, they all lay well back from the highways of commerce and history. But two or three generations later three splendid new cities of the Dorians commanded the salient capes of Cos, Cnidus, and Rhodes, and formed the terminals round which shipping must pass between the Aegean and the Levant. They were thus ready to play their part in the Hellenistic world.

Scholars have not easily reconciled themselves to the belief that the sovereign city of the Coans before 366 B.C. was at the back end of the island, remote from the traffic of the straits and intercourse with the mainland. Hicks preferred to think that before the foundation of the new city the island ὤκειτο κατὰ κόμης;²⁵⁶ but there can be no doubt that the Coans in historical times regarded themselves as a single state and were normally so regarded by others,²⁵⁷ and they must therefore have had a centralized government. In recent years the view has been advanced that already in the fifth century this was situated at Meropis. Modona in 1932 spoke of 'Κῶς ἢ Μεροπίς fortificata da Alcibiade, che era certo la capitale del tempo'.²⁵⁸ Segre expanded this view, pointing to the sepulchral epigram of the end of the sixth century, the mid-fifth-century *horos* of Pythian Apollo, and the Athenian currency decree as evidence of the existence of the classical city of Cos here, and claiming that the only good harbour of the island was that at the north-east end.²⁵⁹ And *ATL* i. 509 follows him. It seems to us that the argument from the harbour has no meaning; V. Bérard has argued the exact opposite.²⁶⁰ As we have shown, the site of Astypalaia is a substantial one, and there is considerable evidence of early Greek and classical occupation and cults there. The absence of inscriptions of the city at Kefalos is not surprising; at Cnidus the earliest surviving public inscriptions do not seem to date before 366 B.C., and in any case the destruction of inscribed marbles at Kefalos (as Paton remarked) has been particularly heavy. Further, we do not believe that Strabo's and Diodorus' testimonies can refer

²⁵² Cf. especially Mackenzie, *BSA* iv. 96 f.; Levi, *Ann.* viii-ix. 235 ff., 310 ff.; cf. also Laurenzi's site (above, p. 122).

²⁵³ Paton-Hicks nos. 420 and 431.

²⁵⁴ Mycenaean chamber tombs have also been reported at Eleona (apparently at the north-east end of the coastal plain of Kardamena=Halasarna), cf. Stubbings, *Mycenaean*

Pottery from the Levant 21 f.; Morricone, op. cit. 323 f.

²⁵⁵ For this view cf. Morricone, op. cit. 322 f.

²⁵⁶ Paton-Hicks, op. cit. xxvii. Herzog also took this view.

²⁵⁷ On this see Segre, *Clara Rhodos* ix. 178.

²⁵⁸ *Memorie* i. 20.

²⁵⁹ *Clara Rhodos* ix. 176 ff.

²⁶⁰ Op. cit. 41 f.

to two different events; and they must be taken together. Diodorus' precise date (366/365 B.C.) must therefore be taken as applying to the removal of the Coans from Astypalaia to the new city.

Diodorus is, naturally, capable of error. But the limitations that he imposed on himself as a historian—his concentration on annalistic presentation and his reliance on his principal sources—should provide a guarantee against a gross error of a hundred years or more in his dating of an event that occurred in the full light of Greek history. He was presumably using Ephorus as his primary source here; and his account of the rapid development of the new city almost seems to reflect the first-hand observations of a writer contemporary with the events. Further, the new foundation that Diodorus describes is the handsome city of later Greek times, with its enclosed harbour and its wall circuit; this cannot be the fifth-century Meropis, which in 412 B.C. was without fortifications. The archaeological evidence favours the fourth-century date; Astypalaia seems still to have been flourishing in the early decades of the fourth century, and at Meropis there is nothing which suggests that the layout of the new city of Cos goes back to an earlier date than 366 B.C.²⁶¹ We therefore feel that the objections to dating the new city of Strabo and Diodorus in the mid-fifth century are very serious, and that only the discovery of overwhelmingly strong archaeological evidence, contradicting that hitherto available, could permit us to set aside the literary testimonies.

Segre makes one specific point.²⁶² A clause in the monetary decree provided that a copy should be set up in the agora of each tributary city and in front of the mint.²⁶³ If the fragment of this decree found in the modern town of Cos was at home there, the agora and city of the Coans must, he claims, have been situated there. If Segre's view about the location of the fifth-century city is wrong, another explanation must be found. It is of course possible that the fragment has reached Cos from outside or was brought to the new city as building material at the time of the move from Astypalaia. But there seems to us to be a better explanation. The Coan copy of the decree, unlike the other four or five known copies, is of Athenian origin. It is of Pentelic marble and inscribed in the Attic script. Segre skilfully explained this exceptional circumstance by the clause restored in the decree that provides for the setting up of copies in the cities by the archons on the spot: ταῦτα δὲ ἐπιτελέσαι Ἀθηναίους ἐ]ἄμ μὴ αὐτοὶ βούλωντα[1. He supposed that in accordance with this provision the Coan magistrates in fact refused, and that the Athenians thereupon provided a copy; he inferred from this that the Coans showed a more independent spirit than the other allies who set up the decree themselves. The relations between Athens and Cos in the middle and later fifth century are in fact very peculiar. In spite of the terms of the currency decree the Coans nevertheless minted silver. Tetradrachms with the legend ΚΩΙΟΝ, ΚΩΣ, or in the Attic form ΚΟΣ, struck on the Athenian standard, began to be issued (as E. S. G. Robinson states²⁶⁴) about 450 B.C.—that is to say, since the decree is dated c. 449 B.C., at about the time that the monetary regulations came into force, and continued until c. 420 B.C. or later; the Coan issues thus cover precisely the period when the minting of silver by the tributary cities was forbidden, and constitute the one inexplicable exception to the rule. This has been explained as defiance of Athens. But such defiance would hardly have been tolerated. It is more natural to interpret the Coan coinage as a privilege or special concession granted by the Athenians. There are two other inscriptions found near the town of Cos which

²⁶¹ Thus, for instance, burials in the heart of the modern town area seem to have been continuing in the fifth century; and the famous cult of Asklepios has been shown to be no older than the mid-fourth century (Herzog, *Kos, Ergebnisse* i. 72; cf. Segre, *Riv. Inst. Arch.* vi (1938) 191 ff.).

²⁶² *Clara Rhodos* ix. 176 f.

²⁶³ Presumably not (as Segre took it) the mints of the cities, but (as E. S. G. Robinson has pointed out, *Hesperia* Suppl. viii. 327) the mint at Athens. The various texts making up the decree are now conveniently assembled in *ATL* ii. 61 ff.

²⁶⁴ *Op. cit.* 337.

belong to this period. Both are *horoi*, and one (probably of the later fifth century) is of the temenos of Ἀθηνᾶ Ἀθηνῶν μεδέουσα (above, p. 121). This Athenian Athena seems to have been an embodiment of the imperial might of Athens and, so to speak, the guarantor that (as at Salamis) the Athenian cause would not fail; she was worshipped at Samos, where was the great naval base of the Athenians, and it has in fact been suggested that the Cos *horos* has reached Cos from Samos. Hicks was inclined to infer from this *horos* that in the late fifth century the Athenians proposed to establish a cleruchy on Cos. We should hesitate to press the matter so far. But we note that Alcibiades built a fort at Meropis, and shortly before that Astyochus treated Meropis with marked hostility. It seems to us likely that there was an Athenian station there. The position was a key one dominating the straits; and the inhabitants of Meropis, which perhaps contained a remnant of the pre-Dorian population of the island, may not have been averse to Athenian control. If there was an Athenian station and administrative centre at Meropis in the mid-fifth century, we need not be surprised if the Athenians set up there a copy of the monetary decree in the Attic script or sponsored the issue of a silver coinage on the Attic standard; and it would be natural that Thucydides, as an Athenian, should refer to this place as Κῶς ἡ Μεροπίς, and then simply as Κῶς.

There is one other source to which we might look for confirmation of this view. If the Athenians in fact set up a control point at Meropis in the mid-fifth century, there might be yet another abnormality in the relationship between Cos, as a member of the league, and Athens: a part of the Coan annual tribute might have been collected at Meropis, and this might be reflected in the quota lists. Examination of the lists shows that at the beginning of the second assessment period the tribute of Cos, which had been fixed at five talents, was divided into two portions—a larger one of 3.56 T. and a smaller one of 1.44 T. This division lasts through the second period; for the third period evidence is lacking, but in the fourth the Coans again pay a single sum of five talents. The tribute may have been divided again in list 23 (432/431 B.C.), when a Coan entry of about 3 $\frac{3}{4}$ T. appears; but the evidence for the Coan tribute after the fourth period is insufficient.²⁶⁵ Anyone who cares to trace for himself all the associations of the Coans in the quota lists will, we think, receive the impression that the major tribute-paying centre of the Coans belonged to the south Carian region, to which Astypalaia faces; it seems to us clear that the larger sum throughout represents the tribute assembled at Astypalaia. It is especially notable that it is at the beginning of the second period, in 450/449 B.C., that the tribute was split, since this coincides with the date given for the setting up of the Athenian monetary decree (449 B.C.) and the approximate date of the beginning of the Coan silver issues.

This triple coincidence cannot be the work of chance. When to it is added the later fort at Meropis and the imperial Athenian *horos* there, the need of a special explanation to reconcile the various anomalies becomes imperative; and we can see no other possible solution than that which we have adumbrated.

There is still one peculiarity in the history of Meropis. The place seems to have declined after the Dorians had established themselves at Astypalaia. But about 500 B.C. it seems to have enjoyed a revival. This is the approximate date of the epigram mentioned by Segre, the symposium relief, and the influx of dedications at the sanctuary of Demeter excavated by Herzog (see above, p. 121). If this emergence of Meropis as a cultural centre was really as sudden as these discoveries would suggest, it may have been connected with the annexation of the island by the despots of Halicarnassus in the opening years of the fifth century. The Coans themselves were satisfied with the situation of their sovereign city at the remote corner of the island. But no

²⁶⁵ For the facts see *ATL* i. 326; the scattered comments of the editors will be found by reference to their index (vol. iv. 68 s.v. Kos).

doubt Artemisia and her husband were fully aware of the strategical importance of the situation of Meropis in the narrows opposite Halicarnassus; and the Athenians in the mid-fifth century may have inherited this interest from the successors of Artemisia. A foreign power dominating Cos must inevitably have its attention focused on this sensitive point.²⁶⁶

Cape Laceter, says Strabo (xiv. 657), is on the south of the island, at 60 stades distance from Nisyros, and close to it is Halisarna; Cape Drekanon is at the west of the island. Strabo has Cape Skandarion opposite the mainland of Caria, and presumably therefore imagined the long axis of the island as running east-west;²⁶⁷ so it is most natural to place Drekanon at the extreme tip of the island (the 'Hook' of Cos, Cape Krikelo) and Laceter at Cape Antimakhi south-west of Kardamena (Halasarna). But Strabo gives the distance from the city (by Cape Skandarion) to Drekanon as about 200 stades, and continues ὁ δὲ Λοκητὴρ προσλαμβάνει πέντε καὶ τριάκοντα τῶ μήκει τοῦ πλοῦ: these figures are distinctly less than the actual distances to Cape Krikelo and on to Cape Antimakhi, and some scholars have preferred to put Drekanon at Cape Dafni (north-west of Kefalos) and Laceter at Cape Krikelo. This corresponds fairly accurately with Strabo's figures. But experience has shown us that not much faith is to be put in Strabo's distances, and the objections to this arrangement seem to us insuperable. The long, rugged, sickle-shaped 'Hook' (Krikelo) is the most striking feature of the Coan coasts, and it is surely to this that the name Drekanon was applied; and for Laceter we have not only the testimony of Strabo that it was near Halasarna, but that of Plutarch (*Q.G.* 58) which associates it with Antimacheia. This double association is decisive in favour of Cape Antimakhi. One other cape is named in this vicinity. In connexion with the myth, in which the island of Nisyros was torn from Cos, Pausanias (i. 2, 4) speaks of the giant Polybotes ἐς ὃν Κῶις ὁ μῦθος περὶ τῆς ἄκρος ἔχει τῆς Χελώνης. This is no doubt the cape, which Sapper and Plieningen mark under the modern name 'K. Chelonia',²⁶⁸ at the point where the coast turns at an angle 2 miles west of Cape Antimakhi; the corner of Nisyros could well be imagined as fitting in there.

There remain the Peleiatæi of the tribute lists.²⁶⁹ The place-name Pele occurs in an inscription of Cos, and is generally considered to be preserved in the modern name Pyli. The editors of *ATL*, relying on their location of Caryanda off the west end of the Myndus peninsula,²⁷⁰ have sought to place the Peleiatæi of the lists at Pele in the middle of the island of Cos.²⁷¹ So far as we can see, the Coan tribute of five talents represented the assessment for the whole island, including Meropis (see above, p. 125). It seems therefore very improbable that a place in the middle of the island was paying independently over a long period. The Peleiatæi paid a considerable sum (normally half a talent), and they seem to have been regular in their payments, continuing to pay through the thirties; they are constantly associated in the lists with Madnasa and Caryanda, and they should therefore be sought in the same region, which we believe to be the south side of the Gulf of Iasus.²⁷² Using similar reasoning, Paton and Myres placed the Peleiatæi at Pelen (Belen) in the north of the Myndus peninsula;²⁷³ but there is not a suitable site there, and we doubt whether the Peleiatæi can have been situated in the heart of the Lelegian *octapolis* here;

²⁶⁶ Cf. also below, p. 142. We have not taken into account the so-called Presbeutikos of Thessalus (Hippocrates, ed. Littré, vol. ix; Hercher's *Epistolographi Graeci*, Hippocr. xxvii), which relates how Cos refused to submit to the Persians and Artemisia's expedition against the island was repelled by divine intervention; we do not believe that any genuine historical tradition underlies this account.

²⁶⁷ This is in accordance with his normal practice; the city of Rhodes is likewise at the east tip of the island (xiv. 652),

and Methymna, being at the point of short crossing to the Asiatic coast, is on the east side of Lesbos (xiii. 616).

²⁶⁸ *Pet. Mitt.* 1920, pl. 28.

²⁶⁹ *ATL* i. 372.

²⁷⁰ *Ibid.* 498; see, however, our observations in *BSA* l. 155 ff.

²⁷¹ *Ibid.* 533.

²⁷² *BSA* l. 155 ff., 164 fig. 14.

²⁷³ *JHS* xvi. 209.

in view of their frequent association with Caryanda in the lists we should prefer to seek them a little farther east. We do not know of a suitable site on the coast south of Bargylia, but the region is unexplored. We should like to connect the Peleiatas with Güvercinlik on ground of identity of name—pigeons are creatures of settled habits; but this is no more than an unsupported conjecture.

KALYMNOS

Kalymnos is an island of sponge-fishers, and in the nineteenth century rose with astonishing rapidity to a standing second only to Rhodes in the Dodecanese. About 1840 its population was 6,000–7,000; fifteen years later it had risen to 10,000; in the opening years of the present century it was estimated at 25,000, of whom 15,000 lived in the harbour town of Pothia and about 5,000 at the *khora* inland. With the transference of the sponge-curing industry to the New World the resident population of the island has now declined considerably and is once again less than that of Cos, though it would still be the greater if the large number of Calymniots living abroad were taken into account. Kalymnos, like Syme, is fearfully denuded; its coasts present an almost wholly mountainous aspect, and in modern times the land does not seem to have been capable of feeding more than 3,000–4,000 people. This barrenness may be partly due to the neglect of agriculture in favour of sponge-fishing; but it is difficult to believe that in ancient times the island can have supported more than 6,000–7,000 people. Calymna was not in fact of much account in antiquity. With Cos it belonged to the despotate of the elder Artemisia, and no doubt also to that of the Hecatomnids in the fourth century; in the Athenian league it never paid more than one and a half talents. Shortly before the end of the third century B.C. it was, as Paton first recognized, annexed by an act of 'homopolity' to the more prosperous Coan state, of which it thereafter constituted a deme.²⁷⁴

Kalymnos was only a minor part of Newton's work in the Aegean; but the archaeology of Kalymnos still largely depends on his investigations there in 1854–5, and especially on his fruitful excavations at Damos and the sanctuary of Apollo.²⁷⁵ A detailed chorographical description of the island was published by D. Reises in 1913.²⁷⁶ And Segre resumed excavations at the sanctuary of Apollo in 1937–9 and prepared a full edition of the inscriptions of Calymna.²⁷⁷

From the point of view of human habitation Kalymnos may effectively be divided into three main cultivated strips. Reises, who attempted to distribute the territory among seven demes, was unable to make any broad geographical divisions; but the scholars who have thought in terms of such divisions have in general recognized the first and second of the strips described here as constituting well-defined areas, without, however, having traversed the third. The first is the southern valley extending across the island from the present harbour of Pothia to the open bay of Linaria and Kandouni; it rises gently to a watershed in the middle at the *khora*, and in addition to the principal concentrations at the harbour town and the *khora* has scattered habitations in the fields and a considerable population in the western valley at Elies and Linaria-Kandouni. The second is the long, flat valley of Vathy, which is entirely enclosed by high, steep mountains save for a breach at the east end, where on either side towering cliffs overhang the narrow entrance of the little harbour of Rina; the fertile plain has a regular population of 900, but many more come from Pothia in the summer; the people here are unusually exclusive; Vathy is the best part of the land of Kalymnos, its habitations being still loosely distributed,

²⁷⁴ See now Segre, *Ann.* xxii–xxiii. 12 ff.; Klaffenbach, *Gnomon* 1953, 457.

²⁷⁵ See *Travels and Discoveries in the Levant* i. 283 ff.

²⁷⁶ Περιγραφή της νήσου Καλύμνου (Athens). Unfortunately

we have not had access to C. Flegel's 'H νήσος Κάλυμνος (Constantinople, 1896).

²⁷⁷ *Memorie* iii. 33–55; *Ann.* xxii–xxiii (*Tituli Calymnii*).

though focal points exist at Metokhi, Platanos, and Rina. PLATE 26 *d* shows the lower part of the valley seen from above Metokhi; the cliffs of Rina harbour appear on the extreme left. The third zone is that on the west, consisting of the small island of Telendos and the adjacent coast from Sykia up to Emborios; there are villages on the east coast of Telendos and at Sykia opposite, and smaller hamlets at Arginonda, Skalia, and Emborios, the total population being now under a thousand; backed against a steep mountainside the settlements here face onto the sheltered waters of the bay as onto a lake, and communication is normally by rowing boat rather than on foot.

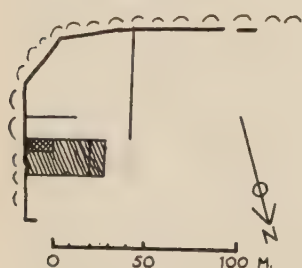


FIG. 16. KALYMNOS: ROUGH PLAN OF THE SITE AT EMBOLAS

Neolithic occupation has been noted in caves in the eastern half of the southern valley²⁷⁸ and in Vathy;²⁷⁹ perhaps also in caves on the north-east coast of the island.²⁸⁰ Mycenaean pottery has been found in tombs in the southern valley²⁸¹ and Vathy.²⁸² The main centres of occupation in classical times seem—not unnaturally—to have been in Vathy and the southern valley. The most impressive surviving construction is a circuit wall in perfectly fitted, squared masonry which lines the edge of a low cliff at Embolas on the north border of the valley of Vathy about 4 kilometres inland from Rina (PLATE 26 *b*). This escarpment, at no great elevation above the valley bottom, runs for several hundred metres eastward from the village of Metokhi, and then turns northward to fade away after about a hundred metres (FIG. 16). On this east return stood a great triklite Byzantine church of the Archangel (H. Taxiarkhes); a smaller chapel of about the seventeenth century has been built into the ruins. The church was built entirely of ancient fortification blocks. The sketch-plan FIG. 16 merely gives the main outline of the surviving part of the circuit, without showing its indentations; there are traces of internal cross-walls inside the circuit. The right-angle bend at the north-east limit of the escarpment may represent an angle of the circuit; it has vertical drafting on the corner. The circuit wall on the south cannot now be traced with certainty for much more than a hundred metres westward along the cliff, but Newton saw the south face running ‘continuously along the rocky edge of this plateau for several hundred yards’;²⁸³ Newton surmised that an ancient town stood here, and the remains of fortification blocks and architectural pieces in the surrounding area and the village of Metokhi suggest that the site was a substantial one. Potsherds, fourth-century and Hellenistic tile are spread over a wide area on top of the escarpment.

²⁷⁸ Near Perakastro and Pothia, Maiuri, *Clara Rhodos* i. 106 ff.

²⁷⁹ In a cave in the cliff face (Daskalio) above Rina harbour, *ibid.* 110 ff.; neolithic pottery in the spoil from a well farther up the valley, Burton Brown, *JHS* lxxvii. 128.

²⁸⁰ At Palionesos and Sykati, Maiuri, *op. cit.* 105. Maiuri also reports prehistoric stone axes kept by peasants as amulets in Kalymnos and various neighbouring islands, but the sponge-fishers travel far afield and are notorious collectors.

²⁸¹ On the east side of the watershed, *BMCat. Vases* i. 1, 189 (for the position, Paton, *JHS* viii. 446, *CR* i. 80); apparently also from Damos west of the watershed.

²⁸² In the Daskalio cave, Maiuri, *op. cit.* 115, with ware of Kamares type; Reises, *op. cit.* 38, at Phylakai. The ancient building which goes by the name of Phylakai (cf. Segre, *Memorie* iii. 39, n. 7) is in squared masonry with vertical drafting at the angles, and forms a square of c. 12·70 by 11·60 m.; it apparently consisted of two main rooms

side by side, with a shallow vestibule (roofed with flagstones) in front of each. We noted Hellenistic sherds there, and imagine the building is of that date. The building is backed against the hill slope, and so perhaps was a strong dwelling rather than a fort; in the surviving west part the exterior door is only 0·65 m. wide, whereas that leading into the main room is 1·00 m. wide (cf. the Lelegian farmhouse near Halicarnassus, *BSA* l. 132 f.).

This building is on the north edge of the valley midway between Metokhi and Rina; Reises seems to place Phylakai close to Metokhi and does not mention a building, so is perhaps not referring to the same place.

²⁸³ *Travels* i. 319 f., where the site has the descriptive name ‘Encremea’; the name δ’ Εμπολος is given by Reises (*op. cit.* 38) and is in use at the present time. Ross speaks of the circuit as an extensive five- or six-sided peribolos (*Reisen* ii. 112). A photograph of the wall, Arias, *Historia* ix (1935) 30, fig. 8.

The identifiable sherds consist of fourth-century black glaze (including kantharos fragments and all-glazed feet with grooved resting surface, of the second quarter or middle of the century), Hellenistic black glaze and half-glazed wares, and a good range of sigillata. We did not note any certainly archaic ware here, but picked up a fair number of fragments of archaic slipped and striped wares at the high crag of Kastellas, which towers at an altitude of two or three hundred metres above Metokhi and commands the pass which leads over to Arginonda. The crag is defended by heavy, semi-coursed, rubble walling and looks like a citadel of early Hellenic times (PLATE 26 c); it resembles the hill-top forts of western Caria, and may well have been a stronghold of Carians in the Vathy valley at a time when the southern part of the island was in Dorian possession.²⁸⁴ Remains and tombs of Roman date are widespread throughout the valley of Vathy; at Rina (whose name comes from the church of H. Eirene) the ruins are principally Byzantine, but seem to go back into Roman times; Rina probably succeeded Embolas as the principal centre of Vathy in imperial times.

The southern valley presents a similar picture of ancient occupation to that in Vathy. The sanctuary of Apollo, whose site is at Χριστός τῆς Ἱερουσαλήμ just west of the watershed, was the repository of decrees and public documents of the Calymnians from the fourth century B.C. onward; but the finds on the spot attest a cult there in early Hellenic and classical times.²⁸⁵ There was a theatre also near the temple.²⁸⁶ Tombs have been reported at many points in the southern valley, and in particular an extensive cemetery area north-west of Ierousalem in the district called Damos.²⁸⁷ At Damos, but in a position which we failed to discover, on the north

²⁸⁴ Cf. Reises, op. cit. 39, where other remains in this vicinity are remarked (including ruins at a place with the interesting name of Empetassos, which may be added to Segre's list of pre-Hellenic-sounding names surviving on Kalymnos); see also Maiuri, *Clara Rhodos* i. 110, and Segre, *Ann.* xxii-xxiii. 1 f., where the various evidences for the old Carian population are discussed.

²⁸⁵ e.g. Newton, op. cit. 307 (archaic marble head = *BMCat. Sculpt.* i. 1, B323, fig. 193), 308 f. (archaic bronze griffin protome; Jantzen, *Griech. Greifenkessel* pl. 41. 1), 312 (fine red-figured fragments); Segre, op. cit. 7 n. 2, pl. 126 (inscribed archaic sherds); from here also, presumably, the Orientalizing plate fragment, Schiering, *Werkstätte orientalisierender Keramik* 64 fig. 4.

²⁸⁶ Newton, op. cit. 310 f.; Segre, op. cit. 148.

²⁸⁷ Cf. Newton, op. cit. 287 ff., 299 ff., 329 ff. Newton dated the finds 330-150 B.C., or later. That, a hundred years ago, was a very remarkable achievement. The recent excavations at Olynthus and in the Athenian agora now make it possible to date with slightly greater precision. We are very greatly indebted to Mr. R. A. Higgins and Mr. P. E. Corbett for arranging for our benefit Newton's finds from Kalymnos in the British Museum; especially to Mr. Corbett for his observations on the Damos pottery, on which the following account is based.

The terra-cotta lamps from Damos start with late examples of Broneer's type VI; there are a number of type VII, one of type VIII, several of type IX, two examples of type XI, and one roughly of type XII (as in Thompson's *Agora* group E, *Hesperia* iii. 393 ff.). There are also some lamps of Roman imperial date, but it is not certain that they came from Damos; they may rather be from Pothia (see below, p. 130, n. 291). The early lamps from Damos can be matched at Olynthus. Among black-glazed wares two bolsals, a skyphos, a cup-kantharos, a kantharos, and two fish-plates can also be matched at Olynthus; there is also a heavy cup-

kotyle and a pair of red-figured askoi (one mentioned *Travels* i. 300, the other exactly matched at Olynthus). This mass of material points to a commencing date in the second quarter of the fourth century for the series of tombs excavated by Newton at Damos.

Among the Hellenistic pottery there are a number of fusiform unguentaries; some are of the earlier Hellenistic form; the latest examples are more advanced than Thompson's group C 76, though not quite so straight-sided as his group D 78. There are several lagynoi (a form most popular around the second century B.C., see Thompson's discussion, his pp. 450 f.); a Megarian bowl of Delian type; a satyr's-head brazier rest found outside the city wall at Damos (examples of the type in Thompson's groups D 76 and E 150). The lamps mentioned above seem to descend towards Thompson's group E. Thompson dated his group D in the mid-second century B.C., and his group E at the end of the second century B.C. and in the early years of the first. On this evidence the burials in the cemetery at Damos seem to have been continuing well into the second century B.C. at least. Newton also excavated a grave at Damos that yielded a Coan coin of the reign of Caracalla.

On the present evidence there may have been a decline in burials at Damos in late Hellenistic times. The cemetery at Pothia in the eastern half of the valley seems to be of late antiquity (below, p. 130, n. 291). So far as it is legitimate to apply the evidence of incompletely excavated cemeteries to the problems of habitations of the living, we might infer a shift of settlement eastward in late times; but this can hardly have occurred as early as the late third century B.C., when the new deme-system was introduced.

Much pottery now in the archaeological collection in the harbour town is said to come from Damos, including Mycenaean and fourth-century vases. Cf. also Ross, *Reisen* ii. 99, iv. 8 ff.; Arias, *Historia* ix. 28, figs. 5-6.

side of the valley below Ierousalem, Newton explored a site on a tongue of land between two ravines. He noted potsherds and foundations of houses, and traced a fortification wall 7 feet wide, with a square tower, for a distance of 165 feet; he concluded that this (like the escarpment at Embolas in Vathy) was the site of an ancient town, and the presence of the large Hellenistic cemetery in the immediate vicinity supports this assumption. The name Damos, which appears to be a survival, is in itself suggestive;²⁸⁸ the date, in the second quarter of the fourth century, of the commencement of the series of graves suggests a corresponding date for the town. There are various other remains between Ierousalem and Linaria, but none of great note. The imposing medieval *kastro* stands on a high bluff north of the watershed;²⁸⁹ there are ancient stones there and a few scraps of fourth-century and Hellenistic ware on the surface, but this does not seem to have been an ancient town-site. Various antiquities have been reported in the eastern part of the valley. Near the harbour town of Pothia there seems to have been at least one ancient sanctuary and a Byzantine church,²⁹⁰ as well as late tombs;²⁹¹ and no doubt there was some habitation, especially in later antiquity, at this harbour which was so conveniently situated for communication with Cos. Between the harbour town and the watershed rises a rocky hillock (Perakastro) with a chapel and some medieval walling on the peak. There is nothing ancient here except a dedication to the Dioscuri, which was built into the doorway and has probably been brought from elsewhere.²⁹²

In the region of the western bay there is a remarkable little rock fastness called Kastri at the foot of a great precipice some ten minutes east of Emborios. The position is defended by two bastions in rough coursed masonry and a connecting screen wall, and is almost inaccessible; protected by the overhang of the cliff, it must have been virtually impregnable. The masonry is not easy to date, and we picked up only late tile fragments. Paton, who described and planned this fort, judged it to be the place of refuge of the inhabitants of this neighbourhood.²⁹³ Various remains, including tombs, vases, and coins, have been reported along this coast as far as Arginonda,²⁹⁴ and there are fragments of ancient tile on the ground at Arginonda and Skalia. Near Cape Aspropoundari there is a Byzantine fortress called Kastelli on a hill over the sea, but otherwise the rugged coastline seems barren of occupation down to the Telendos channel.²⁹⁵ In the vicinity of Sykia opposite Telendos there is fruitful land, and ancient marbles have been seen in considerable quantity; Newton thought these might mark the site of an ancient city.²⁹⁶ On Telendos also, which is easily reached from Sykia across the narrow strait, there are con-

²⁸⁸ Newton, *op. cit.* 286 f., 301 f.; cf. Ross, *op. cit.* ii. 99 (many foundations of ancient buildings and many coins), Reises, *op. cit.* 59 (traces of a very strong fortification, many and great ruins). Ross also surmised that here (as in Vathy) there was an ancient town and believed this to be the principal one on the island; but, not knowing of the fortifications at Damos, he assumed that the habitation extended *καμηδόν* along the valley (*op. cit.* 110).

²⁸⁹ Gerola, *Ann.* ii. 55 ff.

²⁹⁰ Cf. Ross, *op. cit.* 100, Newton *Travels* i. 227, 314; Dubois, *BCH* viii (1884) 41, speaks of ancient substructures, especially at the point where the old church of the Panagia stood. Reises speaks of these remains and cites the judgement of his compatriot Kallisperes that the Ionic order of the temple was not inferior to that of the Erechtheum in Athens (*op. cit.* 28); they concluded that the ancient city of Pothaea lay here, but we have not found evidence to support their view, which seems to be founded in large part on local pride.

²⁹¹ Late Roman and Byzantine lamps and vases in graves at Pothia near the harbour (Newton, *Excavations at Calymnos*

23 f. (= *Arch. Journal* xiii (1856) 36 f.); this cemetery seems to have been in the valley opposite Perakastro.

²⁹² Ross, *op. cit.* 94; Newton, *Travels* i. 316; Reises, *op. cit.* 17; *Ann.* xxii–xxiii, no. 117.

²⁹³ *CR* viii. 376; the plan, *JHS* xviii. 213, fig. 5; Reises, *op. cit.* 47, with reference also to Flegel; photographs, Arias, *Historia* ix. 30 ff., figs. 11–13 (gems and bone relief, *ibid.* figs. 14–15).

²⁹⁴ Ross, *Reisen* ii. 102; Dubois, *loc. cit.*; Reises, *op. cit.* 46 ff. (with mention of Cyclopean fortifications at Vryokastro above Arginonda); Segre, *Memorie* iii. 39, n. 5.

²⁹⁵ A stretch of walling at Kastelli, Gerola, *Ann.* ii. 59, fig. 53. Arias, *op. cit.* 29 f., figs. 9–10, describes an acropolis with dry rubble masonry hereabouts, and calls it 'Anghinarie' (the name does not seem to be otherwise known, and does not occur in Reises); Segre (*Ann.* xxii–xxiii. 1) equates it with Kastri above Emborios, but Arias says that the Kastri fort is visible from the other and to the north-west of it.

²⁹⁶ *Travels* i. 317; cf. also Maiuri, *Ann.* viii–ix. 323, Segre, *Memorie* iii. 34 f.

siderable remains of Byzantine and Roman date, with apparently the traces of a rock-cut theatre, on the coast facing Kalymnos, and a Hellenic fort on the north.²⁹⁷ Thus, while the northern shore of the western bay of Kalymnos seems to have been fairly sparsely inhabited at all times, there is reason to suppose that in antiquity there was (as one would expect) a concentration of population at the Telendos channel.

Some eight demes of Calymna find mention in ancient inscriptions of the island; and attempts to assign locations to the surviving names have generally been based on the assumption that they all existed at one time. But study of the inscriptions long ago showed that there are two distinct sets of deme-names, one belonging to the period of independence, and the other (consisting only of three demes) representing a reorganization of the deme system at the time of the annexation of the island to Cos in the late third century B.C.²⁹⁸ The earlier demes cannot be located with any degree of probability, except for Pothaea (which alone keeps its name in the later deme system) and possibly Skalioidai (if the name is preserved in the modern Skalia); indeed, as Segre remarks, the names of the earlier demes are not completely known. The later demes, however, whose names are Pothaea, Panormus, and Orkatos, should correspond to the facts of habitation in Hellenistic times as revealed by archaeological exploration; and it should therefore be possible to locate them.

Assuming that Pothaea was in the southern valley, where the name Πόθια is at home in modern times, we may say with confidence that Vathy must be either Orkatos or Panormus. Older scholars placed Panormus at Vathy on account of the snug harbour at Rina; and it is true that on the island of Samos the ancient Panormus was the harbour now called Vathy. But the two cases are hardly comparable. Vathy in Samos, though a relatively narrow inlet between steep hill-sides, is nevertheless a very capacious harbour. The harbour at Rina, on the other hand, is very small, and its entrance is inconveniently narrow; and the name Vathy may rather refer to the deep valley itself than to the harbour. Thus Vathy seems an unlikely location for Panormus; and on the other hand the name Orkatos, as Segre has remarked, would fit well with the orchard-like terrain of Vathy. Segre inclined to place the harbour of Panormus at Linaria bay; but the southern valley here acts as a funnel to draw the wind and the bay is exposed to the full fetch of the Aegean; though usable, it hardly offers the capacious, sheltered anchorage that the name Panormus implies.

There was, however, a good harbour on the west coast of Kalymnos, on the evidence of the Greek portolan III:²⁹⁹ 'At Kalymnos', says its author, 'the harbour is in the direction of the south-west in front of the *palaïokastro* of the Gorgon. Opposite the harbour is a tall island called Telendos. And there are two little islands close by, and the channels are clear. Enter wherever you will and rest secure.' Despite the compass point given, there can be little doubt that the

²⁹⁷ Ross, op. cit. 101; Newton, op. cit. 318; Reises, op. cit. 54; Segre, *Ann.* xxii-xxiii. 219.

²⁹⁸ Cf. Paton and Hicks, *Inscriptions of Cos* 354; most recently Segre, *Memorie* iii. 39, *Ann.* xxii-xxiii. 41 f. To relate the three demes to Pliny's notices of Calymna in the way that Segre does (cf. *Ann.* xxii-xxiii. 31) seems to us misleading. In *NH* v. 133 the names of the three towns are in fact given by Pliny (*Calydne (vel sim.) cum III oppidis, Notio, Nisyro, Mendetero(s)*); they bear no resemblance to the known deme names of Calymna; possibly—assuming that the reference is in fact to Calymna—Pliny may have misconstrued a Greek source which (referring to Cos and its demes) stated that Calydne was another deme (of Cos) and

that to the south (of Cos) lay Nisyros. In *NH* iv. 71 the name of the single town is also given (*Calymna, in qua oppidum Coos (vel sim.)*), where the meaning of Pliny's source may have been that Calymna was a deme of Cos). Fortunately the threefold division of Calymna under Coan rule seems to be so securely established on the epigraphical evidence that Pliny need not be used to support it.

²⁹⁹ Delatte, *Les Portulans grecs* 306 (εις τὴν Κάλυμνον ἔχει τὸν λιμένα εἰς τὴν μερὰ τοῦ Γαρμπῆ ὁμπρὸς εἰς τὸ παλαιόκαστρο τῆς Γοργόνας. ἀντίκρυ τοῦ λιμένα ἔχει ἓνα νησί ψηλὸ καὶ λέγουσι τὸ Τέλεντος. καὶ ἔχει καὶ ἄλλα δύο νησιά μικρά σμὰ καὶ εἶναι ἡμποῦκαις καθάραις. καὶ ἔμπα ὁπουθεν θέλῃς καὶ ἄμε σιγοῦρος).

anchorage here mentioned opposite Telendos is not Linaria; the emphasis on the small islands and the channels would be out of place, and in particular the *palaiokastro* can only be Kastelli.³⁰⁰ With the growth of the modern town of Pothia and the attention paid to its harbour, the anchorages on the west side of Kalymnos are now little used by shipping; but both Ross and Newton expressly refer to the excellence of the anchorage for ships in the Telendos channel (which can be cleared in either wind), and thus confirm the evidence of the portolan.³⁰¹ The name Panormus may in antiquity have been applied to the whole bay as far as Emborios, whose name again implies an anchorage used by shipping in time past. If this location of Panormus is correct, the ancient deme-centre is likely to have been on Telendos or the coast near the modern Sykia. Maiuri discovered an inscribed list of the deme of Panormus at a church at Melitsakha near Sykia, and supposed that it had been set up at a temple on this spot.³⁰² But Segre has argued that the inscription must have been transported to the church from the sanctuary of Apollo at Ierousalem;³⁰³ and though Maiuri's judgement on the archaeological issue is not to be lightly set aside, Segre may well be right in this; if so, the deme-centre may perhaps have been on Telendos itself, to judge by the fact that there is a theatre there.³⁰⁴

If our location of Panormus in the western bay and of Orkatos in Vathy is correct, it follows that the southern valley as a whole must be Pothaea, with its deme-centre presumably at Damos and the sanctuary of Apollo. This, so far as we know, has never been proposed hitherto, because the scholars who have concerned themselves with the demes have believed that the position of Pothaea must necessarily have been at the harbour now called Pothia at the eastern end of the southern valley. But there can be no doubt that the principal settlement in the southern valley in Hellenistic times was that at Damos; and (assuming that Pothaea is in the south) the attempt to assign Damos to one of the other two demes unbalances the threefold division of the island.³⁰⁵ It is an incontrovertible fact that the name Pothia is borne, and has for many years been borne, by the modern harbour town; and as early as 1854–5 Newton applied the name to this harbour at a time when the settlement there was still quite small.³⁰⁶ It is, of course, possible that under Coan domination this harbour facing Cos increased in importance and came to usurp the name Pothaea; and the abundance of burials of late antiquity there would fit well with this view.³⁰⁷ But, curiously, its title to the name Pothia has been called in question by a scholar whose authority commands the highest respect—the more so since he was not himself attempting any topographical reconstruction: in describing the position where the Mycenaean vases from Kalymnos in the British Museum were found, Paton cites Newton's attribution of the name to the harbour and expressly states that Pothia is the name of the 'modern town on the hill which bounds the valley on the west' (i.e. the *khora*).³⁰⁸ It is not easy to dismiss so explicit a statement of Paton's as erroneous; and while Newton can hardly have been mistaken in his attribution of the name, it may be the case that settlers at the harbour had taken down with them a name that properly belonged to the region of the watershed. If Paton was right, the attribution of the ancient name Pothaea to the whole southern valley becomes virtually a certainty.³⁰⁹

³⁰⁰ This fortress is said to have been founded by survivors from the destruction of Rina in the ninth century and to have been abandoned later when the population removed to the *kastro* above the watershed in the southern valley. The *kastro* was fully inhabited until the population moved down to the *khora* after the Greek War of Independence (Newton, *Travels* i. 296) and so cannot come into consideration here.

³⁰¹ *Reisen* ii. 101; *Travels* i. 317.

³⁰² Cf. above, p. 130, n. 296. ³⁰³ *Ann.* xxii–xxiii. 139.

³⁰⁴ Cf. the theatres of the Coan demes, as Isthmos and Halasarna.

³⁰⁵ Segre, *Ann.* xxii–xxiii. 42, gives it to Panormus; but it may further be remarked that in the reorganization of the deme system the new name Panormus is not likely to have been given to a deme whose centre was so far inland.

³⁰⁶ *Travels* i. 285, 296. In 1841 Ross noted fifty to sixty houses and a leper station there; he did not give a name to the place (*Reisen* ii. 93). In the second half of the century it was growing steadily, as Newton predicted, into the dominant place in the island.

³⁰⁷ See above, p. 129, n. 287.

³⁰⁸ *CR* i (1887) 80.

³⁰⁹ Newton was told that there was a place called 'Potha'

From his study of the inscriptions Segre deduced that there was a city of Calymna in the material sense in Hellenistic times; he cites a number of references to this *polis* and states unequivocally that the city was Pothaea at the eastern end of the southern valley with its acropolis at Perakastro.³¹⁰ But archaeologically this city does not seem adequately attested, and it is questionable whether any inscription explicitly refers to a city of Calymna in the material sense. In general ἡ πόλις, on the few occasions where it occurs in Calymnian inscriptions, is the state.³¹¹ Only one of the documents cited by Segre contains an unambiguous mention of an inhabited city (no. 64 (=SIG³ 567) l. 9, where a Cretan armada is preparing ἐπιπλεῖν ἐπὶ τὴν πόλιν καὶ τὴν χώραν καὶ τὰς νάσους τὰς Κα[λύδνας or -λυμνίων); and here the city and territory cannot be Calymna (which was a Coan deme at the time), but must be Cos.³¹² It seems, therefore, very doubtful whether the Calymnians in ancient times achieved that physical union in a single *polis* which characterizes all their subsequent history. On the archaeological evidence (so far at least as it can be read in Vathy and at Damos) they seem rather to have committed themselves to a plurality of fortified townships at the time when the synoecisms of the Halicarnassus peninsula and Cos were being carried through. It was about this time that the Calymnian state borrowed a very large sum of money from two Coan moneylenders, thus incurring a debt which it took them two generations to liquidate.³¹³

KALOLIMNOS

The little Donkey Island, Gaidouronesi (also called Kalolimnos), which lies to the north-east of Kalymnos, has, so far as we know, no regular population, but is used as a grazing ground by Calymniot shepherds.³¹⁴ It is very small, and as far as we can ascertain has no ancient remains on it. It is of course not to be confused with the larger, inhabited Donkey Island off Miletus.

If the restoration of *Lampsimandus* (corresponding to an ethnic which occurs in the Athenian tribute lists) in place of *Lampsia*, *Aemyndus* in Pliny's list of islands 'in the Ceramic Gulf' (*NH* v. 134) is correct, and if R. Kiepert was right in identifying this island as Kalolimnos, the Donkey Island must have been inhabited in the fifth century B.C. and paid a tribute of a quarter to a sixth of a talent to the Athenians.³¹⁵ But it seems to us unlikely that the island can have been an independent state, or have been in a position to pay this sum, which should represent a popula-

on Telendos (op. cit. 315), but this can hardly affect the present issue. If Ποθ- in the name Pothaea is the Doric form of Προσθ-, the ancient deme-name may also be preserved in the western half of the southern valley, which in Ross's time was called τὰ Ἐμπροσθὰ (*Reisen* ii. 96) and is called Ἐμπροσθινή (θέσις) by Reises (op. cit. 25, 55); Segre also speaks of a *vicus* Brostà there (loc. cit.) and Newton of a cave called Ἐμπρόστινα μέρη (op. cit. 316).

³¹⁰ Loc. cit.

³¹¹ e.g. op. cit., inscriptions nos. 7. 15; 32. 9; 79 A 6, 9, 15; 79 B 36. The mentions in no. 11. 9 and no. 31. 34 are obscure, and Segre remarks that his restorations are *exempli gratia*.

³¹² Segre's note (op. cit. 85) gives the impression that Herzog believed the πόλις and χώρα to refer to Calymna. But Herzog (*Klio* ii. 319) took them to refer to Cos, and the νᾶσοι to be Calymna and its adjacent islands (cf. the mention of πόλις and χώρα (= Cos) in the Coan decree relating to the same emergency (Segre, *Riv. Fil.* lxi. 365), and that of Halasarna, SIG³ 569. 19). The Calymnian inscription (no. 64) then goes on to relate that the (Coan) admiral decided to meet the armada from Crete and the battle (in which Calymnians took part) was fought off Cape Laceter. Segre had in fact previously recognized that this

was so (op. cit. 378), but he does not seem to have perceived its necessary implication for the objectives of the expedition; the Cretan fleet was not heading in the direction of Calymna and its islands, but steering a course round the other side of Cos, which must inevitably lead to the city of Cos at Skandarion. For the position of Cape Laceter see above, p. 126.

³¹³ Segre, *Ann.* xxii-xxiii, no. 79, p. 121. The Cnidian arbitration of the ensuing claim dates to the early years of the third century, and Segre dates the loan c. 360 B.C.; he remarks that it is quite unknown what this public work was which involved an expenditure beyond the resources of the state, but suggests that it may have been at the sanctuary of Apollo. So far as we are aware, there is no evidence of constructional work at the sanctuary in the fourth century; and we prefer to suppose that the new town-sites were the object.

³¹⁴ Cf. Reises, op. cit. 10.

³¹⁵ Cf. *FOA* xii, p. 2, n. 1; *ATL* i. 513; *BSA* l. 160 f. For the forms of the ethnic in the lists (read as Λεφσιμάνιοι, Λεφσιμάνδοι, Λεφσιμανδῆς, Λεφσανδῆς) cf. *ATL* i. 332 f. Steph. Byz. s.v. gives Ληψήμανδος· πολίχινον Καρίας.

tion of over a hundred families. The community named in the lists seems to have ceased paying in the fourth assessment period, and is therefore unlikely to have been accessible to Athenian ships; its associations in the lists would fit a situation inland from the Iasic Gulf.

LEROS

The strait that separates Leros from Kalymnos is a narrow one, and Reises claimed that in calm weather the voices of the men and cocks of Leros could be heard across the water; but it is the boundary of Ionia. In antiquity Leros was Milesian; and to the present day the Ionic lightness and clarity of speech and temperament of the Lerians afford a strong contrast to the Doric of the islands to the southward.³¹⁶ The outline of the island is strongly articulated. The salient parts are mountainous; but there is good land around the bays and the passes that link them to one another, and it has been well cared for. The population in modern times (6,500, but said to have been 8,500 in A.D. 1898) is a considerable one for so small an island. The prosperity of modern Leros has been partly due to the initiative of its people abroad; but the population must have been a considerable one in ancient times also, if the tribute of three talents paid by the Milesians in Leros in 454/453 B.C. can be regarded as being the normal one. An excellent brief account of the island, with *testimonia* and toponymy, was published by Büchner,³¹⁷ whose early studies of the islands command respect.

At the north end of the island is Partheni bay, whose name derives from the ancient sanctuary of the Parthenos (Iokallis) where guinea fowl and decrees of the Lerians were kept.³¹⁸ Inland near the head of the valley there are some ancient blocks and Hellenistic-Roman sherds at a chapel of H. Georgios (near the road north of Smalou) where Ross found the decree for Hecataeus; down towards the bay, where the sanctuary seems rather to have lain,³¹⁹ there are faint traces of ancient occupation with late sherds; and at H. Eirene, between the bay and H. Georgios, is the ruin of a square tower described and illustrated by Dawkins and Wace.³²⁰ On the hill to the west of Partheni there are said to be ancient remains in heavy masonry, which Oikonomopoulos³²¹ believed to be the ancient city of Leros; we could find no one to direct us to them, but according to the epimelete of antiquities in Leros, Mr. M. Samarkos, they are limited in extent so that there cannot have been a large settlement there.³²²

In the south of the island the crossing between Xerokambo bay and the capacious steamer harbour (τὸ Λακκί) is commanded by a *palaiokastros* set on a steep hill. It is described by Dawkins and Wace.³²³ The fortification, apparently about 30 metres in length on the south face, is in good squared masonry, and two of the angles have vertical drafting. Under the rock fall on the south a tomb containing 'gold cups' is said to have been opened recently. At the *palaiokastros* we noted Hellenistic tiles and pottery and Roman sigillata (including late imperial bowl rims), with a little black glaze of the fourth century B.C., perhaps going back into the fifth.

While Lakki harbour is used by the larger steamers, the main harbour for other craft is at

³¹⁶ Cf. Paton's remarks, *CR* viii. 375 ff.

³¹⁷ *Die Insel Leros* (1898). A description of the island, with some views and a copy of the Italian large-scale map, is also given by F. Bertonelli, *L'Universo* Nov. 1928, 1067-83.

³¹⁸ Athen. 655c; Ael. *NA* iv. 42; Antonin. Liberal. 2; Phot.-Suid. s.v. Μελεαργίδες. On the finding of the two decrees, Ross, *Reisen* ii. 121, Paton, op. cit. 376, Büchner, *AM* xxi. 33, *Die Insel Leros* 36 f. References in documents of Patmos (dated A.D. 1087 and later) and in the Greek portolan III (Delatte, op. cit. 306) guarantee that the name Partheni is a survival.

³¹⁹ Cf. Büchner, *Die Insel Leros* 15. ³²⁰ *BSA* xii. 172.

³²¹ In his book *Λεριακά* (1888), to which we have not had

access; Ross mentioned these remains without having seen them (*Reisen* ii. 122).

³²² For other remains in the north of the island see Büchner, op. cit. 16 ff.

³²³ Op. cit. 172 ff., figs. 17-18. There appears to have been considerable damage to the fortifications since their visit. We could not recognize the line of the curtain on the north side, but their plan shows it clearly. In front of the chapel of the Panagia on the summit there are remains, presumably of an earlier Christian church. The mosaic floor was in black, red, white, yellow, and grey; it had a border of ivy scroll, and geometrical panels within this. Cf. Ross, op. cit. 118.

H. Marina on the east side of the island. The modern town, which stretches inland from the harbour to the old *khora* at Platanos, lies under a commanding hill, whose summit, 600 feet high, is crowned by the Byzantine and medieval *kastro*;³²⁴ we noted ancient marble blocks and pieces of early Christian *thorakia* built into the walls at the *kastro*, and a fragment of a red-figured bell-crater, but no ancient fortification. There may perhaps have been an ancient sanctuary on the summit. A zigzag path leads up to the *kastro* from Platanos; it seems in part to follow an older track, whose massive revetment can be discerned at a couple of points and may be ancient. In the region of the modern town ancient building material and tiles have in the past been reported;³²⁵ but the remains remarked were too slight to permit any firm conclusion to be drawn. In recent years, however, Mr. Samarkos has diligently observed and collected the remains of antiquity which have come to light, and has been able to reach the conclusion that the principal ancient settlement on the island was at H. Marina.³²⁶ The principal point of discovery is the flower garden created by the old priest Papanastasi on the hill slope just above the town. Curved slabs from a baptistery or σύμβρονον have been uncovered here, with inscriptions under the moulding;³²⁷ and part of an *ambon*, *thorakia*, Byzantine colonnettes, and an Ionic capital also came to light. Several ancient inscriptions have been found here.³²⁸ Near the harbour four tombs built of marble blocks were discovered during the recent occupation; they are believed to have contained an Egyptianizing statuette and a silver coin of Alexander amongst other finds. Another tomb opened some decades ago is reported to have contained classical relief slabs. On the lower slope of the hill here on the edge of H. Marina sherds are numerous and of fine quality. In particular we noted wares of the seventh century B.C. (some being of a Geometric appearance and perhaps going back into the eighth century), fragments of early archaic Ionic cups of various types and of Orientalizing animal style and Fikellura, archaic domestic wares and a lamp fragment, some Hellenistic ware, and a wide range of Roman sigillata. Just across the valley on the west of H. Marina a marble statuette of a draped figure with a snake was recently found near the spring called Palaiaskloupi, which seems to have preserved the name of Asklepios.

There is no trace of any fortification on this site at H. Marina; and the situation is not one that lends itself to enclosure in a circuit. But it can hardly be other than an inhabited site; it would seem to be too extensive for a sanctuary, and in any case the main sanctuary of the Leriens, where decrees were kept, was at Partheni. In view of the bulk of the ancient remains it seems probable that this was the main inhabited site on the island, with occupation beginning in the seventh century B.C. (if not rather earlier) and continuing into Byzantine times. The absence of fortifications would correspond to the status of ancient Leros, which was not an independent city but a dependent colony of the Milesians.

L I P S O I

The panorama PLATE 26 *a* was taken from the citadel, looking north-west over Sokoro bay; Tarsana cove is seen at the foot of the slope in the centre of the picture, and the anchorage and

³²⁴ For the *kastro* see Gerola, *Ann.* ii. 61 ff.

³²⁵ Ross, *op. cit.* 119; Büchner, *op. cit.* 32; Rehm, *Milet* ii. 2, 25.

³²⁶ Cf. his article in *Μηνιαία Ἐπιθεώρησις Λέρον, ἔτος α', ἄρ.* 2, Dec. 1956.

³²⁷ These were unfortunately chiselled away by the occupying authorities.

³²⁸ Mr. Samarkos in his article cites the following from the priest's garden: ΔΗΜΟΣ ΛΕΡΟΥ—ΘΗΒΑΙΘΙΣ ΑΝΤΙΠΑΤΡΟΥ—

ΑΣΤΑΣΙΗ ΠΟΛΥΔΑΜΑΝΤΟΣ (the last of these, which we saw, is in early Hellenistic *stoichedon*). Other inscriptions apparently from the region of the modern town are the base Ἀνδρίδης ἥρωος (*Clara Rhodos* ii. 235, no. 137, on the *kastro*) and another [Ἀ]νδρίδης—δήμου, a late epitaph of one Tryphaena, and perhaps the epitaph *Ann.* i Notiz. 318. It is not clear whether the phrase Δῆμος Λέρον cited above constitutes an epigraphical text.

village on the right; the chapel of H. Nikolaos can be seen on the promontory on the right of Tarsana cove. In the distance Patmos is visible on the left, and Arkious with its accompanying islets on the right.

This small island (Leipsò, Lipsoi, Lipsoùs), the ancient Lepsia, lies north of Leros. It is barren and hilly in its western half; but the eastern end is cultivated. The modern village, with its anchorage and jetty, is at the east end of Sokoro bay; the population is reported to be as much as 900. The antiquities of the island have hitherto not been described. At the harbour head a small promontory forms the south shore of the modern anchorage, and divides it from a cove called Tarsanà. On the low crest of this promontory are traces of foundations and squared blocks by the chapel of H. Nikolaos; and a small area around it is littered with ancient sherds of good quality and tiles of the fourth century B.C. There is much archaic ware of the sixth century there, with some perhaps of the seventh; good black glaze of the fifth and fourth centuries, and fragments of early sigillata. The area where sherds lie on the ground is very restricted, and the site must be that of a small sanctuary; in all probability St. Nicholas here is the successor of Apollo Lepsieus. A minute or two south of this is a chapel of the Panagia; here and at the neighbouring chapel of H. Markella are Doric and Ionic column drums, unfluted drums, and a Christian *thorakion*; on the south side of Tarsana cove graves have been found with vases and a 'coin of SS. Constantine and Helen'; Byzantine coins are found in the fields here. At the Panagia we saw the decree previously copied by N. Khaviaras in the vicinity of the harbour³²⁹ and a fragment of another one (below, p. 137, no. 2). The new fragment indicates the sanctuary of Apollo as the repository of the stele; and the points of discovery of these two inscriptions agree well with a location of the sanctuary at H. Nikolaos.

Some minutes inland, to the south-east of Tarsana, rises a low hill, whose flat top is about 130 metres long (sloping gently down from west to east) and about 55 metres wide from north to south. Along its edges an ancient circuit can with difficulty be traced. The fortification is well marked at the east end, where there seems to have been a sort of bastion in more or less rectangular coursed blocks measuring c. 16 by 13 metres. The rest of the perimeter was of rough work; the west end seems to have run in a curve, with no trace of towers but apparently with angles or indentations. There are faint traces of foundations in the interior. Traces of terraces and dense sherds seem to indicate that the ancient habitation continued down the south slope of the hill under the circuit wall. We found a few fragments of archaic ware, black glaze of the fifth and fourth centuries, fragments of Hellenistic plates and amphorae, sigillata (not apparently of later imperial types), and a Hellenistic bronze coin of Miletus. The site seems without doubt to be the citadel of ancient Lepsia; its harbour was probably the Tarsana cove.

A small inscribed altar, whose main text honours the phrourarch Dionysius and dates to 41/40 B.C.,³³⁰ was found by Roubines 'among the ruins of the old acropolis of Lepsia'—presumably the site just described.³³¹ From this site also comes the altar to Zeus Genethlios (below, p. 137, no. 5); and we were told of another naming Artemis, which is said to be still on the site.³³²

It appears from the decrees of the island that the inhabitants in Hellenistic times were Μιλήσιοι (or τῶν πολιτῶν) οἱ κατοικοῦντες ἐν Λεψία, and in the first century B.C. at least Lepsia had annual phrourarchs.³³³ The island at this time therefore was incorporated in

³²⁹ *AE* 1915, 133 no. 12 (then built into a wall by the harbour of the island, where were traces of an ancient building).

³³⁰ Antiochus, son of Aeschines, being stephanephoros of Miletus in that year (*Milet* i. 3, no. 126).

³³¹ See below, p. 137, no. 4. Another phrourarch dedication, perhaps of 70/69 B.C., Sakkelion, *AE* 1890, 221.

³³² Quoted by I. Paradeisos in the peculiar form (τῆς) Ἀρτέμιδος Πλατυτέρας ἡμετέρας. The epithet Πλατυτέρα (τῶν οὐρανῶν) is of course inappropriate in this context; our informant appeared to be confident of the reading of the name Artemis.

³³³ Haussoullier, *Rev. phil.* 1902, 125 ff. (*non vidimus*); Rehm, *Milet* ii. 2, 22 f.

the Milesian state, apparently not having (like Leros) the status of a deme. Since, unlike Leros and Teichiussa, it does not appear alongside Miletus in the Athenian tribute lists, it was evidently part of the Milesian state in the fifth century. There is no literary tradition of the first settlement of Lepsia; but Leros (with Icaria) was named by Anaximenes among the Milesian colonies,³³⁴ and if this is so Lepsia must also have been a Milesian foundation. On the evidence of the surface pottery the Milesian settlement will have taken place in early archaic times. There seems to be no sign of the earlier Carian or Dorian occupation that modern historians have postulated on Leros and Lepsia, and the settlement of these islands seems to belong to an early stage in the colonizing activity of Miletus.³³⁵

Lepsia lay opposite Cape Poseidion of the Milesians. With Leros and Lepsia, as with Teichiussa, we have passed the limits of historic Caria.

INSCRIPTIONS OF LIPSO

1. The prescript of a decree of the (Milesian) citizens resident in Lepsia, which was published by N. Khavariar (AE 1915, 133 no. 12), is now built into the church of the Panagia (above, p. 136) and plastered over. Our copy agreed with that of Khavariar save that at the right edge we could only read κατοικο[- (l. 1), ταῦτα (l. 5), καθίσταν[-

(l. 6). Below l. 7 the face of the stone seems quite blank.

2. At the same church, a fragment of a blue limestone stele, broken on all sides save perhaps on the right edge; pres. ht. 0.22 m., pres. width 0.15 m., thickness 0.065 m. Letter-ht. 12 mm. Lettering of c. second century B.C., with broken-barred *alpha*.

5 [- - - - -]ΙΙΕΡΩ[- - -]
 [- - - - -]! τῶν ἄλλ[ων?]
 [- - - - -]γρ]αφάσθωσ[αν]
 [- - - - -]ἄνδ]ρες οἱ αἰρεθεῖ[ν]-
 5 [τες - - - - - ? ὅπω]ς δοθῇ ἡ Α![- - -]
 [- - - - - ? Ἀπόλλωνι] τῶι Λεψιε[ῖ. ἄ]-
 [ναγράψαι δὲ τόδε τὸ ψήφισμα εἰς] στήλην λ[ι]-
 [θίνην καὶ ἀναθεῖναι εἰς τὸ ἱ]ερὸν τοῦ Ἀ-
 [πόλλωνος] vac.

We believe that this inscription establishes the identity of Apollo Lepsieus as the principal deity of this island; for the probable position of his sanctuary see above, p. 136.

3. In the same place, a fragment of a thin white marble slab resembling a tile; on the edge (0.058 m. high):

- - /ΧΗΚΑΙ - -.

4. The little altar published by Sakkelion from N. Roubines's copy (AE 1862, 265, cf. Bent, JHS vii. 144) is now over the door of a house in the village. Ht. 0.35 m., width 0.37 m. Letter-ht. c. 22 mm. The two uppermost lines read by Roubines are at present almost illegible; but the name ΕΩΙΜΕΝΟΥ, in different characters, can be seen under the last line read by Roubines and Bent. Ἑλαῖον should no

doubt be read in l. 6; cf. ΕΛΑΙΝΟC on a sarcophagus from Perge (A. M. Mansel, *Excavations and Researches at Perge* (Ankara 1949) ii, no. 8, and pl. 8, fig. 34).

5. In the house of I. Paradeisos, from the acropolis (above, p. 136), a little altar 0.30 m. high, 0.18 m. wide, 0.14 m. thick. Letter-ht. 13-20 mm. Poor lettering, the *epsilons* lunate.

Διὸς

Γενηθλίου.

On altars with the name in the genitive see L. Robert, *Mél. Isid. Lévy* 569 n. 1.

³³⁴ *Ap.* Strabo xiv. 635.

³³⁵ Lepsia at least must be included in the Milesian islands of which L. Robert has found mention in a decree of Miletus and another of Aptera (*Hellenica* i. 113 ff.); but Rehm's doubts (*Milet* ii. 2, 20, and 26) and Robert's state-

ment that Miletus laid her hand on Lepsia, Patmos, Leros, and Aigiale (in Amorgos) in Hellenistic times (*Ét. num. gr.* 11) are incompatible with the literary and epigraphical evidence for Leros, for which see Büchner, *Die Insel Leros* 30 ff.

6. In the village, from near the church of H. Nikolaos, a whitish marble slab 0.42 m. high, 0.49 m. wide, 0.08 m. thick. Letter-ht. 20-25 mm. Epitaph in late Hellenistic

lettering at the bottom of the face, with traces of effaced letters (?) at the beginning of l. 1.

Εὐβιος Μελησ-
σάνδρου χαῖρε.

THE HECATOMNID PLAN FOR CARIA (FIG. 17)

When Strabo informs us, on the authority of Callisthenes, that Mausolus concentrated the six Lelegian townships into Halicarnassus but preserved Myndus and Syangela, he seems not to have fully understood the scale of the reorganization in western Caria.³³⁶ Halicarnassus was indeed transformed, as befitted Mausolus' new capital; but Myndus and Theangela were also remodelled at the same time, one (if not both) on a hitherto vacant site; and they were designed to fulfil the requirements of Greek city life. These three cities, situated at intervals of five to six hours' walking, served as the political foci of the Halicarnassus peninsula. Bargylia again lies at about the same distance from Theangela; Mylasa is a little more distant from Bargylia. With such short intervals the pattern of cities is considerably closer set than that which Alexander's successors were concerned to establish in the east Aegean. But such a network of smallish cities was well suited to the geographical conditions of Caria; it was such as to allow all the citizens to attend to their fields and at the same time to play their part in city life. In fact, though these new cities may not at first have been entirely successful and provided a target for the occasional jest, their history shows that they were not too cramped to achieve autarky; it was by means of them that this region of Caria was grafted onto the Greek world and that its population was held firmly together into Byzantine times.

Mausolan Myndus and Theangela call to mind two other Carian sites. Heracleia by Latmus, set on a steep mountain spur above the Bafa lake, is distinguished by its extensive fortifications, which in their general disposition resemble those of Theangela on its mountain peaks. We reproduce the German plan of Heracleia (FIG. 5) for comparison with Theangela (FIG. 6). The resemblance becomes most striking when (bearing in mind the difference in scale of the two plans as reproduced here) one compares the partitioning of the interior by cross-walls, the powerful forts pushed out onto the high points, and the beak-like salients that descend the ridges. The layout of the two sites reflects a similar application of the principles of defensive strategy to the point of suggesting that one architect designed both; and to this may be added the striking resemblance between Heracleia and Halicarnassus in the exterior line of the fortification on the north-east of both sites, which follows an outer crest separated by a valley from the interior one.³³⁷ As regards the masonry at Heracleia, the facing of the circuit is exactly matched at Priene. Krischen, in his publication of the fortifications of Heracleia, quoted this resemblance as evidence of an early Hellenistic date, assuming that effectively the construction of new Priene was subsequent to Alexander the Great's passage through Ionia in 334 B.C.³³⁸ But this is simply conjecture; and it is itself inseparably linked with Krischen's conviction that the fortifications of Heracleia were built by Cassander's brother, Pleistarchus, who made his capital there about 300 B.C. and renamed the city Pleistarcheia.³³⁹ It is generally believed that

³³⁶ xiii. 611; cf. our discussion in *BSA* l. 143ff.

³³⁷ Cf. *BSA* l. 91 (with plan, fig. 2).

³³⁸ *Milet* iii. 2, 51. This dating is presumably based on the theory that Priene was refounded by the Athenians in the mid-fourth century B.C. at the time when they were on friendly terms with the arch-rebel Orontes, who may possibly at some time have gained possession of Ionia as far

south as the Maeander. Hence the assumption that Orontes' reconciliation with Artaxerxes Ochus will have caused the suspension of work at Priene. The resemblance of the fortifications of Heracleia with those of Lysimachian Ephesus, which Krischen also remarks, is less striking.

³³⁹ For Pleistarchus cf. Robert, *Inscr. Sinuri* 57 ff.



FIG. 17. POST-MAUSOLAN CARIA

the early Hellenistic dating of the fortifications of Heracleia is established on archaeological grounds; and the date thus won has remained undisputed even by scholars who reject the attribution to Pleistarchus;³⁴⁰ but at both Heracleia and Priene the main fortifications are thoroughly classical in appearance,³⁴¹ and at Priene it is more natural to suppose that the fortifications date to the refoundation of the city in the mid-fourth century. As regards Heracleia, the Latmioi who paid a tribute of a talent in the Athenian confederacy undoubtedly possessed a city of some consequence in the fourth century before the time of Alexander the Great, since it is named by Ps.-Scylax (99) as one of the very few πόλεις Ἑλληνίδες that he recognizes on the coast south of the Maeander; and the fact that he knows it under its new name Heracleia suggests that a refoundation had already taken place a generation or two before the renaming under Pleistarchus. The new name, Heracleia, like Theangela and others, accords well with Hecatomnid hellenization; and a couple of stratagems related by Polyaeus (vii. 23, 2; viii. 53, 4) attest the interest that Mausolus and his family had in the possession of this Heracleia. The remarkable resemblance in strategical layout to the known Mausolan foundations of the second quarter of the fourth century thus provides the confirmation that Heracleia was a Hecatomnid foundation. It may have been somewhat later than Theangela, on general historical grounds at least; the peculiar features of the defensive system seem to be more accentuated at Heracleia.

In the other extremity of Caria, Caunus in classical times was a place of some consequence; for Ps.-Scylax it is a Καρικὴ πόλις, but in the Hellenistic period it has all the attributes of a Greek city. Mausolus' interest in it is attested by statue-bases of him and his father,³⁴² and the conversion of the city to Hellenism was no doubt due to him. Among the most striking of the extant remains on the site at Dalyan is the great land wall, some 2 miles in length, of which the earliest part almost certainly dates to the fourth century B.C.³⁴³ It is not easy to envisage any likely occasion for the building of such a wall, if it were not inspired by the Hecatomnids; and the one striking analogy in the layout of the wall on the western extension of the acropolis hill is the wall on the peninsula at Mausolus' new maritime foundation of Myndus.³⁴⁴ We therefore feel no doubt that Caunus was one of the sites remodelled by the Hecatomnid rulers of Caria.

It thus appears that Mausolus' new πόλεις Ἑλληνίδες were not confined to a single district of Caria; and the question must arise whether he and his successors were not putting into effect a plan for the hellenization of the whole of their realm by the creation of a network of cities which would be spaced to give political cohesion to the countryside and designed to inculcate the Greek way of life. The proper study of this problem would of course require a closer knowledge of the interior parts of Caria than we can lay claim to; and since the majority of the sites have not been examined from this point of view, the survey that we attempt is inevitably a tentative one. Two points also should be borne in mind. First, in the years following the death of Idrieus (c. 344 B.C.) the despotate of the Hecatomnids began to be distracted by a struggle for power in which Pixodarus succeeded with Persian support in usurping the dynastic power, while the elder Ada, the widow of Idrieus, maintained herself in the north of Caria at Alinda; the period of settled rule, therefore, in which an overall plan for the hellenization of Caria could be pressed forward, may not have exceeded twenty-five years, and in so short a time a plan so

³⁴⁰ Thus Robert, with due caution, suggests Eupolemus as the author of the fortifications at Heracleia (loc. cit.); von Gerkan, *Griech. Städteanlagen* 16, n. 2, and Magie, *Roman Rule in Asia Minor* 918, suggest Lysimachus.

³⁴¹ Scranton's definition of them as 'pseudo-isodomic', coupled with his acceptance of Krischen's historical dating, seems to us misleading (*Greek Walls* 134, 181 f.), and we should rather not apply the term here. If, on the other hand, Scranton's classification of them is retained, it seems as

though the commencing date of this 'pseudo-isodomic, quarry to hammer face' class must be raised. The treatment of the face is the normal classical one; and since on historical grounds the fortifications of Philippi also are more naturally to be dated in the middle of the fourth century, it seems in fact that mid-fourth-century dates actually preponderate in this class.

³⁴² Bean, *JHS* lxxiii. 20, nos. 3-4.

³⁴³ Op. cit. 12.

³⁴⁴ Cf. *BSA* l. 108 ff., 145, n. 240.

vast, requiring the presence of teams of masters and skilled craftsmen in so many places, could hardly have been brought to completion. Second, it was the main coastal cities that were, so to speak, the gateways of Caria and would naturally be its show-places. While Mausolus, like his father, laid stress on sea-power, it was inevitably the coastal cities that most needed strong defences when he was challenging the naval might of Athens; and it was in the vicinity of the sea that the Greek way of life could most readily be adopted. Thus in a master plan for the hellenization of Caria the interior would perhaps not receive the same treatment as the coast, and we should not expect to find such clear traces of Hecatomnid remodelling there. In some cases, perhaps, it would be sufficient to strengthen existing sites, fostering political institutions of Greek stamp and encouraging the citizens to pass decrees, form *thiasoi*, and in general act as participants in the Greek *paideia*.

Bargylia, the neighbour of Theangela, seems to have sprung suddenly to the status of a Hellenic city. In the fifth century it was an insignificant place, not at all comparable to the dynastic seat of Cindya across the salt-marsh. But in early Hellenistic times Cindya seems to be dead, and Bargylia has acquired some, if not all, of its territory. It is not improbable that this synoecism was part of the Hecatomnid plan—the maritime situation is characteristic, and such a sudden and drastic reversal could not have been effected without an overriding authority—but there is no proof of it; it is not likely to have been achieved as early as the known Mausolan synoecisms; for on the one hand Cindya does not seem to have been abandoned as early as the Lelegian towns of the Halicarnassus peninsula (above, p. 97), and on the other hand Bargylia (unlike Heracleia and Myndus) is not mentioned in Ps.-Scylax' list of πόλεις Ἑλληνίδες.

To the north of this, Iasus takes its position in the network as the last city in Caria before Miletus.³⁴⁵ It was not unimportant in the fifth century, and the inscription SIG³ 169 shows it to have been responsive to Mausolus' control; but like Bargylia it was not cited by Ps.-Scylax. The Hellenic fortification of the peninsular site (above, p. 101) might date to Hecatomnid times. On the north side of the Maeander, Priene offers a new city-site, which was founded sometime about the middle of the fourth century and must have been chosen on account of the impregnable garrison position (the Teloneia) which dominates the city; there is nothing inherently improbable in a Hecatomnid strongpoint north of the Maeander—Tralles was in the despotate at the time of Idrieus' accession, and Polyaeus (vii. 23, 2) represents Mausolus as advertising his intention of marching against Phygela to the north of Mycale—and it is perhaps no accident that Mausolus' architect-in-chief, Pytheos, was engaged at Priene.³⁴⁶

For other Hecatomnid foundations or remodellings in west Caria we are reduced to conjecture. Despite Mausolus' removal to Halicarnassus, the old capital of Mylasa continued to be an important centre. Mausolus levied money from the citizens for new fortifications, but did not actually use it for the purpose;³⁴⁷ the city, like the neighbouring sanctuaries of Labranda and Sinuri, seems to have been endowed with dedications of the Hecatomnids, with Greek established as the official language. The city of Eurome has an extensive circuit and buildings which are impressive in scale; it may have been selected as the centre of a synoecism by the Hecatomnids, but here again evidence is lacking.³⁴⁸ Kildara, if we are correct in our identification of the site

³⁴⁵ Inland from this was the hyperakrian Pidasia, perhaps at Palamutlu Kale on a high summit of the Grion range.

³⁴⁶ For the *testimonia* for Pytheos see Hiller, *Inschr. v. Priene* 204, no. 465.

³⁴⁷ Ps.-Arist., *Oecon.* ii. 1348 a.

³⁴⁸ For Eurome see especially Laumonier, *RA* 1933, ii. 40 f. The history of the territory called the Euromos in Hellenistic times is one of flux (sympolities made and unmade, dispute over the cities in the Euromos, and over the

possession of land there by Pidasians and Latmians). The use of the name to denote a region considerably greater than the territory of the city of Eurome might possibly be explained by an earlier, abortive synoecism there. The change of name from Ὑρ- to Εὐρ-, if it is a 'euphemistic' change like that of Syagela-Theangela (for the extraordinary complexity of the problem see Robert, *Hellenica* viii. 35 ff.), would most naturally fit with Mausolus' hellenizing policy.

(p. 99), seems to be a hill-top town with powerful fortifications, not unlike Theangela, though apparently on a much smaller scale; its style of masonry and its position on a ridge which down to the fourth century B.C. was dominated by Cindya should rule out a date before Hecatomnid times for this fortified site; and on the other hand, the inscription discovered by Robert at Kuzyaka shows the Kildareis as issuing a decree in Greek in the fourth century B.C. There seems therefore a fair likelihood that we have here one of the lesser Hecatomnid foundations. The network in this part of Caria would be well articulated if we could assume that the later city sites (Hydissos,³⁴⁹ Ceramus,³⁵⁰ and perhaps Bargasa (at Gökbel)³⁵¹ and Kasossos) were selected as the focal points. But this region is inadequately explored. East of Theangela and Cindya the Hellenistic pattern has not yet emerged quite clear; and it is uncertain whether it represented so drastic a remodelling of the earlier pattern of habitation as the synoecisms of the Halicarnassus peninsula.

In the islands the new foundation of the Coans at Cape Skandarion, destined to become one of the handsomest of Greek cities, must correspond closely in time to the Mausolan synoecism at Halicarnassus. It is dated 366/365 B.C. and said to have resulted from *stasis*.³⁵² It is the generally held view that at this time Cos belonged to the second Athenian confederacy. But Cos did not join that confederacy at its inception in 377 B.C. and is not found associated with Athens in the ensuing years; and it is mentioned (in company with Mausolus) as helping the three states (Rhodes, Chios, Byzantium) which seceded from the league in 357 B.C.³⁵³ It must appear very doubtful whether the Coans, if they had not been on terms of alliance with Mausolus or dependence on him in 366/365 B.C., would have had the audacity to move their capital from the far end of the island to the tip directly opposite Halicarnassus, and more probable that from the outset they were under his protection. Thus the synoecism of the Coans may well have been inspired by Mausolus and his faction in Cos and rank as another of the great Hecatomnid concentrations. The handsome fourth-century fortress of Nisyros and possibly the city at the north end of Telos may, again, owe their origin to Hecatomnid imperialism; again both were nominally independent, but did not join the second Athenian confederacy. In the island of Calymna two towns seem to have come into being about the time of the Coan synoecism (above, pp. 128 ff.).

In the north Carian interior the occurrence of Hellenistic renamings (e.g. Tralles–Seleucia, Alabanda–Antioch, and Alexandria ad Latmum, which is commonly identified with Alinda) would perhaps suggest that the main effort of urbanization came after Hecatomnid times. But recent investigations by the Roberts and Martin are beginning to shed a welcome light on some of the cities here; and not only Alinda, where the elder Ada maintained herself until the arrival of Alexander the Great, but Amyzon also show evidence of the interest of the Hecatomnids. At Amyzon buildings and inscriptions are dated back into the fourth century B.C.; a dedication by Idrieus, apparently of the propylon of a temple terrace, has come to light; and

³⁴⁹ For the site, at Karacahisar, see Robert, *AJA* xxxix. 339 f., pl. 39; the fortifications shown seem to be fourth-century or Hellenistic.

³⁵⁰ For references see *BSA* l. 135.

³⁵¹ *Ibid.*

³⁵² Diod. xv. 76, 2; Strabo xiv. 657. See our discussion of its problems above, pp. 120 ff.

³⁵³ In Diod. xvi. 7, 3 (where it is clear that Diodorus had no conception of the significance of Mausolus' participation in the war) the Coans are named among the revolting states; but the contemporary authorities speak as though only Chios, Rhodes, and Byzantium were in revolt (Isocr.,

Peace 16, *Antid.* 63; Dem. *Rhod. Lib.* 3). Cf. Judeich, *Kleinasiatische Studien* 283, n. 1: 'Wenn Diodor an der ersten Stelle die Koer mit unter den "abfallenden Bundesgenossen" aufzählt und 21, 1 noch einmal dieselbe Phrase aufnimmt, so wird man aus dieser Angabe schwerlich, wie das bisher gewöhnlich geschehen ist (vgl. u. a. Schaefer Dem. I² 166 f.), auf die Zugehörigkeit von Kos zum zweiten attischen Seebund, über die wir sonst nichts wissen, schließen können. An der dritten Stelle 21, 2 werden von Diodor in Übereinstimmung mit Isokrates, Demosthenes und Trogus ganz richtig genannt nur Χίοι καὶ Ῥόδιοι καὶ Βυζάντιοι μετὰ τῶν συμμάχων.'

Robert compares this terrace with one which he has remarked at Mylasa and believes to be a Hecatomnid construction.³⁵⁴ Following up a suggestion of Laumonier's,³⁵⁵ Robert also considers that the layout of Alinda may date from the time of Ada;³⁵⁶ and Martin now suggests that the resemblance between the public architecture of Alinda and that of the Pergamene cities is not to be regarded as a sign of late date in the former, but may indicate that the Carian terraced architecture served as an inspiration or model for the Attalids.³⁵⁷ Halicarnassus, the capital of Mausolus and his successors, will not itself bear the reconstruction of superimposed terraces that Martin seeks to impose on the site, since the terrain is not really such as Vitruvius' description of it would seem to imply;³⁵⁸ but this need not invalidate Martin's theory, which, if it proves well founded, will demonstrate that the Hecatomnid remodelling of Caria, which we have sought to establish, was accompanied by considerable originality in city planning.

THE DYNASTIES OF WESTERN CARIA

At the west end of the Halicarnassus peninsula the principal city of classical times was Termera.³⁵⁹ It was under the rule or leadership of Histiaeus, son of Tymnes, in the early fifth century, and perhaps of another Tymnes after the middle of the century. This family, which we can with some confidence call a dynasty, struck silver coins; for there was found on the coast here a drachma with the legend TYMNO on the obverse and TEPMEPIKON on the reverse. To the east of Halicarnassus lay Syangela, the seat of the dynasty of Pigres in the fifth century. To this dynasty must be attributed the silver coins of which a group was found recently at Alâkilise (above, p. 95). On Etrim Dağı, the site of Hellenistic Theangela, there is a corbel-vaulted chamber tomb (the one in which handsome Attic vases of the late fifth century were recently discovered), which we have assumed to be a dynastic tomb.³⁶⁰ At Termera there is another such tomb, the interior of which we illustrate in PLATE 20*d*;³⁶¹ and at the Greek city of Halicarnassus, which was also ruled by a dynasty (that of Artemisia and Lygdamis) in classical times and in the fourth century by Mausolus and his successors, there was the great dynastic tomb of Mausolus, which may have been preceded by earlier dynastic burials on the spot.³⁶² These data are plotted on FIG. 18, which seems to us to show that dynastic seats, vaulted tombs, and issues of silver coins formed something of a regular pattern in this district in classical times.³⁶³ At Cindya there was a dynasty in the fifth century B.C., if not earlier (see above, p. 99). No classical tomb has as yet been pointed out there,³⁶⁴ and no coins can be attributed; but it seems to us likely that among the unidentified classical issues of Caria there may be an unidentifiable

³⁵⁴ CRAI 1953, 411-13.

³⁵⁵ BCH lviii. 298. It is worth noting that Laumonier had already remarked the resemblance between the terraces of Labranda, Alinda, and Pergamon (RA 1933, ii. 44).

³⁵⁶ Op. cit. 413. For Alinda see the plan, Trémaux, *Exploration arch. en Asie min.* Alinda, pl. 1 (cf. Perrot-Chipiez, *Histoire de l'art* v, fig. 224); Lebas, *Voyage arch.* pl. 62. Cf. JHS xvi. 240, where Paton notes close resemblances with Çömlekçi Kalesi (Asardağ=Kildara?, above, p. 99); Laumonier, op. cit. 298, fig. 10. The Praxitelean Aphrodite at Alexandria ad Latmum (Steph. Byz. s.v. Ἀλεξάνδρεια, 1) may possibly be regarded as a further indication of the status of Alinda in the fourth century.

³⁵⁷ R. Martin, *L'Urbanisme dans la Grèce antique* (1956), 149 f.

³⁵⁸ Op. cit. 148. The great platform, which Martin (following Newton) supposes to be the 'Temple of Mars' and which he has made the culminating point of his terraces, is not (as

Vitruvius says of the temple) *in summa arce media*, but in the flat ground (cf. BSA l. 87 f.).

³⁵⁹ For the *testimonia* see BSA l. 147-9.

³⁶⁰ BSA l. 113, 146, pl. 16 c; and above p. 93, FIG. 8.

³⁶¹ The photograph by Mr. R. V. Nicholls. The position of the tomb is shown approximately in our plan, BSA l. 117 fig. 5, under the west end of the citadel.

³⁶² For the underground gallery and chambers on the south side of the Mausoleum see Newton, *Halicarnassus* ii. 127 f., 147 f.; cf. also BSA l. 94 f.

³⁶³ The chamber tumulus at Burgaz (Paton and Myres, JHS xvi. 246 f., cf. BSA l. 166) and perhaps also one at Gürice (BSA l. 121) might be explained as dynastic if (as we have assumed on other grounds) the dynasty of Termera moved farther north in the peninsula during the second half of the fifth century (ibid. 148).

³⁶⁴ On this see Paton and Myres, op. cit. 196.

coinage of dynastic Cindya; only a fortunate discovery, such as that at Alâkilise, would make an identification possible.

One other point seems worth remark in connexion with FIG. 18. In this district the pattern of fourth-century synoecisms appears to correspond to that of the fifth-century dynasties; Theangela is the successor of Syangela, and Bargylia of Cindya; Myndus is the new centre of what had once been the Termeric union. This does not of course mean that in the fifth century

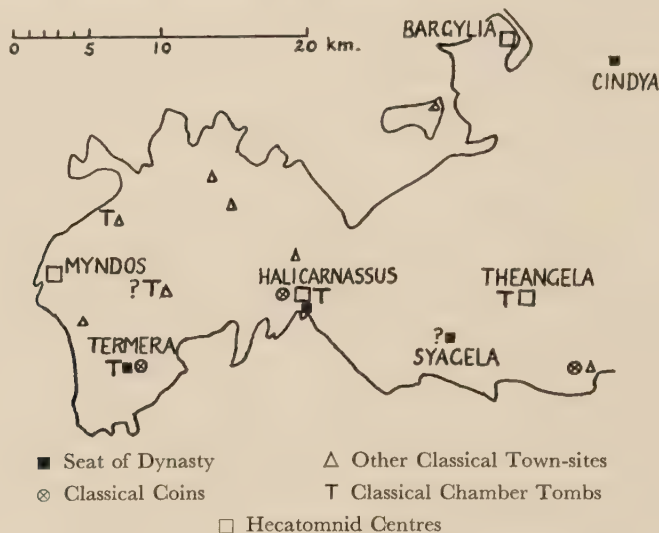


FIG. 18. THE HALICARNASSUS PENINSULA IN CLASSICAL TIMES

the population was concentrated in the dynastic centres; from the Athenian tribute lists and Callisthenes' mention of six old Lelegian cities synoecized by Mausolus in Halicarnassus we obtain a picture of habitation in a relatively large number of small towns which approximately correspond to the modern Turkish villages, and archaeological examination has shown this picture to be accurate.³⁶⁵ But the coincidence of the pattern of dynastic seats and of post-Mausolan cities is nevertheless a striking one; and it may well be that from the point of view of the concentration of political power this larger-scale pattern was a dominant one, and that the pattern of dynasties, which must have been already established in the sixth century, continued to be valid until the time of Mausolus.

Idyma was not a Greek city, but Carian. It has a large classical site, and the Athenian tribute lists show that in the mid-fifth century it was ruled by a dynast (see above, pp. 69 f.). It also issued coins, identified by the legend ΙΔΥΜΙΟΝ, which are dated in the second half of the fifth century, descending into the fourth;³⁶⁶ if we are right in our view of the association of classical coin-issues and dynasties in mainland Caria, it would follow that Idyma was under dynastic rule for a considerable time. This seems to us to be borne out by the notable series of classical tombs there (see above, p. 71). These are not chamber tombs, but rock-cut tombs with an architectural façade; there does not appear to have been a tradition of chamber tombs in the region at the head of the Ceramic Gulf. But they are handsome and monumental; and if they are dynastic, the number of these tombs implies several generations of dynasts, who must have been ruling for a considerable part of the fourth century at Idyma.

Again, at Elmalı, which we believe to be the most probable site for Cyllandus, we noted a

³⁶⁵ Cf. *BSA* l. 143 ff.

³⁶⁶ *BMCoins Caria* lxi f.; Head, *HN*² 621.

pair of similar tombs (above, pp. 73 f.). Down to the year 447/446, after which it drops out of the quota lists, Cyllandus paid the unusually large sum of two talents in the Athenian league, and we should suppose that an important dynasty was established there. In the assessment of 425/424 B.C. (A 9, col. ii, lines 96–97) there is an entry which seems to indicate a new Carian dynast: Meritt and West read:

ΤΤ [Κι]λλ[αρῆς]
 [hō]ν Σα[- ἄρχει],

and relate this entry to Kildara near Cindya (above, p. 100).³⁶⁷ This reading has been arrived at by admirable reasoning, and epigraphically it is perhaps the best available. But it is in the nature of things a conjecture, and the reading [Κι]λλ[αρῆς] is not free of difficulties. The line division is curiously unequal if the word in line 96 was only of eight letters;³⁶⁸ the next column on the right must have been dislocated, unless the dynast's name was a conveniently short one; it is of course possible that it was,³⁶⁹ and that the stone-cutter made his calculation accordingly; but the line division would be less unnatural if the ethnic was more than eight letters long. If Meritt and West were right in supposing that this people is the same as the Κι[λ]αρῆς of the fourth list (451/450 B.C.), the increase of tribute is from 1,000 drachmae in the quota list to no less than 12,000 drachmae in the assessment; this is not of course unparalleled, but at least it is exceptional. There is no literary mention of classical Kildara; and a place that had been paying no more than 1,000 drachmae would not easily rise to the position of a dynastic centre. Naturally, if it could be supposed that in the third quarter of the fifth century Kildara expanded at the expense of its neighbour Cindya, a sudden rise of this sort would be explicable. But in fact Cindya appears in this same assessment list (A 9) as charged with a tribute of four (or, less probably, eight) talents and ruled by a dynast; and it seems to us most improbable that there can have been two flourishing dynasts living in these two towns which were so close together (if not actually on the same ridge). It appears to us therefore that the practical objections to the reading [Κι]λλ[αρῆς] in A 9 outweigh the epigraphical merits of the restoration, and we are very doubtful whether it can be Kildara that figures as a dynastic centre in the assessment of 425/424 B.C. The name Sambaktys appears in the first assessment period, without an ethnic (as other dynasts in lists of this period); he pays a talent. If he was a Carian dynast, it is possible that the name which Meritt and West read as [Κι]λλ[αρῆς] in A 9 represents the seat of Sambaktys' dynasty; in that case the ethnic is likely to have been a longer one than Κιλλαρῆς in view of the division in lines 96–97. The increase of tribute from one to two talents would be a reasonable one.

An alternative that suggests itself is to read [Κυ]λλ[άνδιοι] in this place; and the position between a small neighbour of Idyma on the one hand and Caunus on the other is very suitable, in so far as position counts in A 9. But Meritt and West judged that there is sufficient space in front of the first *lambda* on the stone to rule out the possibility of a properly centred *upsilon* (or other vowel than *iota*) in the second place.³⁷⁰ For this reason we incline to the current view that it is not in col. ii, lines 96–97 of this list that Cyllandus makes its appearance, but in col. i, lines 141–2, where the stone has (after Idyma)

Τυμν --
Κυλλ --.

³⁶⁷ See *AJP* 1937, 390 f.; *ATL* i. 156.

³⁶⁸ Contrast in col. i, lines 113–14 of the same list

[Κᾱ]ρ[ες h~ν]

[Τ]ύμν[ες ἄρχει].

³⁶⁹ Robert has drawn attention, in this connexion, to the

name Σαμῶν (gen.) in his fourth-century inscription of Kildara (*Hellenica* viii. 14).

³⁷⁰ Meritt and West, *Athenian Assessment* 21, 71 f.; cf. *ATL* i. 114 fig. 161.

The first name is difficult. Tymnus in the Chersonese should not occur in the lists, and Tymnessus is completely shadowy. Possibly we have here a dynast, l. 142 being the singular Κυλλ- [άνδιος].³⁷¹

This, with the addition of Mylasa, completes the list of known dynasties in west Caria, though it is likely that more existed.³⁷² Our main evidence for these Carian dynasties is of the fifth century. But some, as that at Termera, can be shown to have been established as early as the sixth century; others (as at Idyma) seem to have been flourishing well on in the fourth century, and the Hecatomnid reorganization of west Caria seems, in part at least, to have followed the geographical pattern of the dynasties. We are therefore inclined to regard these dynasties as a persisting element in the political organization of the country throughout classical times.

G. E. BEAN

J. M. COOK

³⁷¹ Cf., e.g., Πακτύες Ἰδυμ[εύς] (list 2), Πίκρες Συνα[γελεύς] (list 1), Πίγ[ρες] | Σνα[γγελ]εύς (list 23). For Tymnessus see now Robert, *Hellenica* x. 189 ff.

³⁷² e.g. Nikon (near Yenice, see above, p. 71) and Arideolis (tyrant of the Carian Alabanda, Hdt. vii. 195) may have been established as dynasts.

NEW FRAGMENTS OF LINEAR B TABLETS FROM KNOSSOS

(PLATES 27-28)

I. CIRCUMSTANCES OF FINDING

IN the course of his work at Knossos Sir Arthur Evans set aside a number of tablets, which remained there after the main collection had been removed to the Museum in Iraklion for safe keeping. Some of the fragments retained by Evans were rediscovered in the Villa Ariadne soon after the Second World War by Dr. N. Boufidis of the National Museum in Athens; drawings of them were sent by him to Sir John Myres, who published the texts for the first time in *Scripta Minoa* ii, where they are distinguished by the prefix 'M'.

Other fragments of tablets which had remained at Knossos were discovered there by Dr. N. Platon in 1956, when he was working in the Stratigraphic Museum. One, published here as X 8101, has already been correctly transcribed in *Scripta Minoa II* and in *The Knossos Tablets*, in which publications it is numbered 04-94. A second fragment (S 8100), published here for the first time, belongs to the category of armour. The boxes in which the two tablets were found had 'Little Palace' labels on them, but unfortunately they are not a sure guide to the original provenience of the tablets themselves, which appear to have been stored without the exact knowledge of Evans. A third tablet (Og8102) was found about the same time in the neighbourhood of the pine-trees to the north-west of the Palace. All three pieces were brought to our attention by Dr. Platon, to whom we are most grateful for the suggestion that we should publish them. The photographs are the work of Mr. Androulakis of Iraklion, to whom we are indebted for his assistance.

The remaining pieces discussed in the present article were found in the store-room maintained by the British School in the grounds of the Villa Ariadne in September 1956. They are probably the fragments known to have been in the School's store-room between the two World Wars, when Evans would not have given special attention to tablet fragments, of which he had large numbers. As Dr. Platon suggests, an intensive search of the boxes in the Stratigraphic Museum at Knossos may bring other tablets to light.

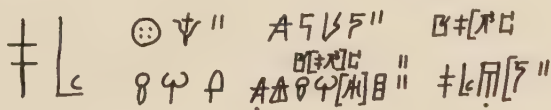
It is impossible to determine the part of the Palace in which Evans originally excavated the tablets published here. Their separation from the main collection in Iraklion may be due to their having been found in small trial excavations in the Palace area, but not even the two tablets found in the Stratigraphic Museum may be assumed to have come from the Little Palace. With the exception of Og8102, the origin of every tablet discussed in the present article is unknown.

G. L. HUXLEY

II. TEXT AND COMMENTARY

S 8100

(PLATE 27)



qe-ro₂ 2 e-po-mi-jo 2 o-pa-[wo-ta

PA-RA

ko-ru HELMET o-[pa-wo]-ta 4 pa-ra-wo-a-[jo 2
e-pi-ko-ru-[si]-ja

This important find supplements and confirms two imperfectly preserved tablets, V 789 and G 5670, which were commented on in *Documents in Mycenaean Greek* nos. 299 and 300. They must now be reclassified, and the new tablet has been given the general classification S- denoting chariots and armour. The parallel series at Pylos are the *Sh*- ('corslet') tablets.

The reading confirms at once Ventris's brilliant supplements [*ko*]-*ru* in 5670, where traces of the *ko* remain; and *e-po-mi*-[*jo*] in 789, where nothing but the shape of the break indicates the *mi*. This new tablet falls into the category of two-line tablets which are only divided after an initial word in large characters; and on these it is frequently the habit of the scribes, especially those dealing with military equipment, to write the lower line first, continuing the text in the upper register.¹ There seems to be no means of determining the order in this case on purely epigraphic grounds; but for reasons which will appear later I believe the lower line is to be read first.

Each tablet appears to record a single suit of armour, since both here and in 5670 there is but one helmet; the absence of a numeral here is no obstacle, since the form *ko-ru* is obviously singular. The pair of *qe-ro*₂ on 789 also agrees with the number of these articles on the other two tablets. The introductory word is therefore more likely to be a man's name than a generic definition such as 'armour'; for this would probably show varying numbers of the articles recorded, not complete suits. In 789 this introductory word ends in]-*ra*, and could, but need not, be supplemented [*pa*]-*ra* as here. For lists of equipment assigned to individuals, cf. the Knossos *Sc*- tablets. If a name, *pa-ra* might stand for *Pallans*, cf. *Pa*₂-*ra*₂ PY An192.16; if a generic term, Professor L. R. Palmer has suggested to me a connexion with φάλος.

ko-ru: *korus* 'helmet'. The form of the ideogram differs slightly from that of 5670,² but the spelling is a welcome confirmation of the word. The genitive *ko-ru-to* (= *koruthos*) occurs at Pylos (Sh733, &c.) and the instrumental *ko-ru-pi* on Ta642.2.

o-[*pa-wo*]-*ta e-pi-ko-ru*-[*si*]-*ja*: the tablet has been badly cracked by the heat of the fire, but there can be little doubt of the reading. *o-pa-wo-ta* is found on 5670, and in the parallel series at Pylos. Its meaning is discussed in *Documents* 376-8, to which there is nothing to add; the only meaning to fit all cases seems to be 'plates' or 'scales'. These are described at Knossos as *epikorusia* 'on or for the helmet' and number four here or two in 789; at Pylos they are described simply as *koruthos* 'of the helmet' and number consistently four.

pa-ra-wa-[*jo* 2]: cf. 789, PY Sh737. The word is the dual *parāwaiō*, equivalent to the Homeric παρήιον, 'cheek-pieces'.

*qe-ro*₂: the definition of this word proposed in *Documents* is 'the name of a bronze artefact of more or less rectangular shape'.³ Various views were discussed on pp. 380-1 of the same book, the most likely being that it represented some kind of foundation for a corslet. A reconsideration of the evidence now leads me to propose an alternative, and I think more attractive, suggestion.

The word occurs only at Knossos, in the three tablets discussed here and K 740.3.⁴ In the suits of armour *qe-ro*₂ is always followed by the numeral 2,⁵ so that we can deduce that it is something worn in pairs, though we cannot dismiss the possibility that the two halves in fact make a single object, like a pair of trousers. The next entry, in at least two cases, is *epōmiō* 'shoulder-pieces', and S 8100 continues with another mention of *o-pa-wo-ta* 'plates', which by the analogy of the Pylos *Sh*- tablets can hardly be any but those of the corslet itself. It would

¹ Cf. *Documents* 111-12.

² See *Documents* 381.

³ p. 407.

⁴ The reference to X 5306 in Bennett's *Minoan Linear B*

Index should be deleted; the fragment has been joined to Db1204 and its correct reading is now seen to be *qe-ro*, a name which has nothing to do with *qe-ro*₂.

⁵ Cf. also QE ZE 1, KN Sc266.

appear, whatever the order of the lines, that line 2 relates to equipment for the head, line 1 to that for the body; and we may reasonably assume the head to have come first. Thus *qe-ro₂* are something which stand before the shoulder-pieces and body armour; and the consistent order argues that this is significant. On this supposition *qe-ro₂* can only be related to the *arms*, and their use in pairs is thereby explained.

K 740 (PLATE 28) shows a list of bronze articles, the other entries being thirty-one bronze vessels called *di-pa*, one tripod amphora called *ku-ru-su-pa₃*, and an obscure object which may be a saw or some such implement. The entry *qe-ro₂* is followed by the sign for BRONZE, a drawing of the object and a numeral which is probably 16. Two facts emerge from this: the *qe-ro₂* are made of bronze, and are roughly rectangular in outline. If this tablet is the *talasia* or list of goods made by a smith, the number 16 and the context suggest that they are more likely to be relatively small objects like the *di-pa* than large ones like the tripod.

The drawing is vaguely similar to the undoubted corslets shown on the Knossos *Sc*-tablets. But a careful examination shows notable differences. (1) The proportions of the sides do not agree; the *qe-ro₂* has its horizontal sides longer than the vertical ones, in the corslet the horizontal sides are only half the length of the vertical. (2) The corslet is normally drawn with a single outline; the *qe-ro₂* is shown with double lines, and those on the left curve towards each other in the shape of a lens, thus suggesting that this may be a crude indication of a hollow object. (3) The top of the *qe-ro₂* is yoke-shaped, but does not overlap the sides, as does the top of the corslet. It is also slightly asymmetrical, the left end being higher than the right, but this may be accidental. (4) The horizontal bars usually shown on the corslet are lacking.

If, as suggested above, it is an article worn on the arms, it must be an arm-guard, intended to protect the upper arm and overlapped by the shoulder-pieces. The yoke-shaped top is accounted for, one end bulging to accommodate the biceps, the other the elbow-joint. It is clearly not the guard for the fore-arm worn by archers, on the left arm only. Archaeological evidence for such pieces of armour does not seem to be forthcoming; but it must not be forgotten that there is equally no archaeological evidence for two-piece metal corslets, though scale corslets are known to have been in use at this date in Anatolia and Syria. As far as I know there is no exactly contemporary picture of a warrior in full armour. The absence of *qe-ro₂* and *e-po-mi-jo* at Pylos possibly reflects a change of fashion in armour; the Pylos corslet may have incorporated some protection for the arms and shoulders.

This interpretation derived from purely contextual arguments must now be tested etymologically. First we may note that the word for 'corslet' at Pylos is *thōrax*; *qe-ro₂* could be the Knossian equivalent, but generally speaking the same terms are in use at both places. Corslets at Knossos are sometimes surcharged *QE* (e.g. *Sc*224), but this does not prove that they were called *qe-ro₂*. The shortness of the word allows a number of phonetic interpretations. Palmer⁶ proposed *q^uhelioi*, an invented word which he compares with *φάλον*, *φάλαρα*. But it is unnecessary to invent a word if we accept the meaning 'armlet': *sq^ueliō* is a plausible interpretation of the spelling, with *ro₂* yielding the full vowel *i* as elsewhere, and this agrees perfectly with the Aeolic form *σπέλιον* or *σπέλλιον*⁷ of the common *φέλιον* 'bracelet'. Since the etymology of the word is uncertain we cannot assume, with the ancient grammarians, that *σπ-* is merely a metathesis of *ψ-*, and there is in any case no reason why this should not have been the Mycenaean form. The singular or dual for plural in K 740 is no objection, for the preceding entry shows the singular *di-pa* despite the numeral 31.

e-po-mi-jo: *epōmiō* 'shoulder-pieces'.

o-pa-[wo-ta]: these plates, as suggested above, are probably those of the corslet.

⁶ *Bulletin of the London Institute of Classical Studies* ii. 38.

⁷ Schol. Dion. Thrax 203, 504 H, An.Ox. 4.326.

X 8101
(PLATE 27)

⌈⌒⌒, ⊕⌒⌒, ⌒⌒⌒⌒⌒, ⌒⌒⌒
⌋⌒

vacat

] -su-ra ka-ta-ro ku-ri-sa-to ra-wi-[

] -da

]

vacat

This fragment is already published in *Scripta Minoa II* as no. 04-94, the text of which is confirmed. The two complete words give little clue to the subject: *ku-ri-sa-to* recurs at Pylos⁸ and is there a man's name. *ka-ta-ro* might be for *katharos*, the reading proposed for it on a fragment of a jar at Mycenae (Z 202); but a personal name cannot be excluded. If this is a list of names, there is not much hope of restoring the damaged words. *ra-wi-[* suggests the Pylian *ra-wi-ja-ja* = *lāwiaiai* 'captives', and the shape of the break implies that the next sign had a square outline like *ja*. This seems to exclude the man's name *Ra-wi-zo* Dw1245.

Og8102
(PLATE 27)

⌋⌒⌒ ⌒⌒⌒⌒, ⌒⌒⌒⌒
⌒⌒⌒⌒ ⌒⌒⌒⌒ [

da-wi-jo a-pu-do-si po-[ni-ki-jo

e-pu₂-no po-ni-ki-jo [

This fragment can be assigned on the basis of its formulas to the category *Og-*; the distinction from *Ga-* is merely the use of weights rather than measures for this commodity.

da-wi-jo: ethnic of *Da-wo*, cf. Am568, Ga1530.1, X 7376.

po-ni-ki-jo: the name of an unidentified spice; see *Documents* 222.

e-pu₂-no: probably not an ethnic but a personal name. It is not found elsewhere.

D 8103
(PLATE 27)

⌋⌒

⌒⌒⌒⌒⌒
⌒⌒⌒⌒ [

EWE 60[

] -DA

e-ko-so [

Another fragment of the large series dealing with sheep.

e-ko-so: a well-known place name, apparently *Exos*, but not identified.

X 8104
(PLATE 27)

⌋ vacat
⌋⌒⌒

] vacat
]-we-jo

X 8105
(PLATE 27)

⌋⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

⌒⌒⌒⌒

The reading of the ideogram is a little doubtful as the lower edge is blurred, but CLOTH (No. 159) seems to be the only one which will fit. CONDIMENT (No. 123) is excluded by the lack of

⁸ An5.7, Cn4.2, Jn706.4.

a conical top or handle. The adjunct *ko*. is not known elsewhere, but cf. the common descriptive word *ko-u-ra*; *re*. occurs in L 5875.

X 8106
(PLATE 27)] 𐀓 𐀚 []-jo LB [

Possibly *Og*-, to be restored [*po-ni-ki*]-jo, cf. Og397.

X 8107
(PLATE 27)] A 𐀢 [] e-ŕe-... [

The surface is badly cracked; possibly *e-re-pa-ŕe-jo*.

X 8108
(PLATE 27)] 𐀢 𐀢 𐀓 []-RU-WA-jo [

X 8109
(PLATE 28)] 𐀢, 𐀢 𐀓 []-U pa-sa [

X 8110
(PLATE 28)] 𐀢, []-ko [

X 8111
(PLATE 28)] 𐀢 𐀢 [] 200
] vacat] vacat

Possibly a *D*- (sheep) tablet.

X 8112
(PLATE 28)] 𐀢 [] ke[
] A 2 B 𐀢 [] e-we-o-ŕi[

X 8113
(PLATE 28)] 𐀢 [] no[

X 8114
(PLATE 28)] 𐀢 [] 6 (or 9?)

X 8115
(PLATE 28) illegible

JOHN CHADWICK

Addendum

Inspection of the originals in the Iraklion Museum in July 1958 confirmed the readings as given above, except for L 8105. Further cleaning of this tablet revealed the existence of two words written in the upper register: *o-pi-si-ri-ja-we* *pe-ko-to* (cf. Lc646); the first sign preserved in the lower line is probably 2 rather than *ja*.

TO ΔΕΜΑ: A SURVEY OF THE AIGALEOS-PARNES WALL

(PLATES 29-35)

THE wall surveyed in this article¹ is a continuous defensive fieldwork in north-western Attica, situated some six miles from Athens; it closes a prominent gap in the mountain-ring around the city, linking the ranges of Aigaleos to the south and Parnes to the north (FIG. 1). The local name for this wall, τὸ Δέμα 'The Link', is both apt and specific and is being used in this article; in the past the wall has sometimes been referred to as the Aigaleos-Parnes wall and sometimes also as the Ano-Liosia wall from its relation to the nearest modern village.

The lack of a detailed survey of the Dema, combined with a complete absence of literary references in ancient authors, has compelled earlier writers to base their theories largely on grounds of historical probability. The divergences in their conclusions are not surprising, and clearly demonstrate the need for detailed information about the remains. We have accordingly made a field survey of the Dema² and offer a full description of the wall in the belief that this will lead to a truer interpretation of its function and also its date.

I. BIBLIOGRAPHY

Below are listed previous contributions to the study of the Dema wall, including descriptive accounts and attempts to date it.

I. Works with references of an archaeological or topographical nature to the Dema.

W. M. LEAKE, *Travels in Northern Greece* ii (1835) 382; *The Topography of Athens and the Demi* ii: *the Demi of Athens* (1841) 49, 143-4; recognizes the need for a barrier across the Aigaleos-Parnes pass; describes briefly the construction of the wall, its 'jogs' and many posterns, with a sketch-plan of one; and suggests its use against cavalry some time in the Hellenic period.

A. CONZE, *Arch. Anz.* in *AZ* 1858, 197-8; discusses the invasion route of Archidamus, briefly describes the wall, and, partly from its polygonal style, would date it after that event.

A. DE ROCHAS, *Revue générale de l'architecture et des travaux publics* xxxvi (1880), col. 54; mentions the Dema in an interesting discussion of ancient defensive works and related tactics, but the reference suffers from his misunderstanding of Leake's plan of a postern.

E. CURTIUS and J. A. KAUPERT, *Karten von Attika* (1881-1903), map vi, with A. MILCHHOEFER, *Erläuternder Text* Heft ii (1883) 44-46, 47, 48, 49. The fullest treatment of the subject so far. The wall, estimated as 4,260 metres long with 15-20 posterns in its southern course, is well described; it is seen as part of a broad scheme of defence (represented also by 'watch towers' on Aigaleos and elsewhere) built originally to meet a particular and temporary need, probably during the eighth century B.C. wars between Athens and Eleusis, and later used as a customs frontier.

J. G. FRAZER, *Pausanias' Description of Greece* (1898) ii. 428; gives a very short description in terms almost identical with Leake's.

A. SKIAS, *AE* 1919, 35; describes the more northerly parts of the wall and tentatively dates it to the rule of the Thirty Tyrants in Athens, before their seizure of Eleusis.

T. Hodge, and R. Tomlinson, students of the British School, helped in the preliminary stages of surveying. The Royal Hellenic Air Force were approached for an air-photograph, and we are extremely grateful for the magnificent series which they have presented, and of which we publish a selection.

² The survey was carried out with tape and compass. The full survey (scale 1:1000) with a separate sheet of all the sallyports (scale 1:100) is in the library of the British School. PLATE 29 is from an enlargement of Curtius and Kaupert's *Karten von Attika* no. vi, on which was superimposed the surveyed plan of the Dema, corrected for slope but modified in drawing so as to show details of plan.

¹ This work was made possible by courtesy of J. Papadimitriou, Ephor of Attica. The article was written in co-operation: the field-survey was carried out (spring 1955) by J. E. Jones and L. H. Sackett, who are responsible mainly for the bibliography, description, and interpretation, while C. W. J. Eliot has contributed the section on historical evaluation. Thanks are due for help and advice to M. S. F. Hood (Director of the British School), to whom we owe a number of improvements in the text, to J. Boardman, to J. M. Cook for permission to reproduce one of his photographs (PLATE 32 a), and to members of the Agora Excavation Staff. Professors A. W. Gomme and H. T. Wade-Gery usefully discussed certain points, and A. J. Graham,

G. K. GARDIKAS, *PAE* 1920, 66–71; describes the locality of the wall and some of its features, but overestimates its length and height; draws particular attention to a circular tower close behind the wall, a possible command-post; and dates the fortification to the period preceding the Peloponnesian War.

L. CHANDLER, *JHS* xlv (1926) 19, 21. Brief description of the Dema, accurate but limited; two photographs (figs. 13, 14) and a map of the frontier defences, showing the relation of the wall to these but representing its line inaccurately; and approval of an early date, before the unification of Eleusis with the rest of Attica.

W. WREDE, *Attische Mauern* (1933) 11, 43, photos 28, 29; has two excellent photographs of the wall face and a commentary on the wide variety of masonry styles used, and conjectures from this a hurried construction and an affinity with a 'rustic' style thought to have ousted the polygonal style in Attica during the fourth century B.C.

R. L. SCRANTON, *Greek Walls* (1941) 39–42, 147, 154–5, 161, 186; reviews previous notices of the Dema; classifies the style of the masonry as rubble with Lesbian (curvilinear)

influence; dates the wall from this and historical probability to the seventh or eighth century B.C.; furthermore, he explicitly identifies the indented trace of the wall with the enfiling *à crémaillère* device and considers its form here rudimentary and particularly early.

STERLING DOW, *Hesperia* xi (1942) 193–211, with photographs. The only publication specifically devoted to the Dema, mainly an attempt to discover an historical context for the fortification. Dow first, accepting Scranton's classification, argues from historical probability for the period 528–480 B.C.; then describes the extant remains, incompletely, in places misleadingly, but on many points adding and improving; and finally concludes that the wall was built in 506 B.C. to impede Cleomenes' advance into Attica.

R. MARTIN, *BCH* lxxi (1947) 135 ff., with pertinent remarks on the indented trace.

J. POUILLOUX, *La Forteresse de Rhamnonte* (1954) 46 n. 2, 53 n. 4; observes that indented traces indicate a fairly late development and that the Dema had been dated too early by Scranton and Dow.

II. Works which mention the Dema and offer some historical opinions on the first-hand authority of references in List I, but which in some cases have themselves been quoted as authorities.

W. G. CLARK, *Peloponnesus* (1858) 30–31, asserts that the rampart traced by Leake could not have existed during the Peloponnesian war, was probably built when a Gaulish invasion threatened, but was never used and so never mentioned by early writers.

G. FOUGÈRES, *BCH* xiv (1890) 89; *Mantinee et l'Arcadie orientale* (1898) 159 and n. 1: in a convincing discussion of the multiple sallyports at Mantinea and the defensive tactics involved, cites the Dema as an analogy but only incidentally.

T. WIEGAND and H. SCHRADER, *Priene* (1894) 36, mentions briefly the Dema and Iasus in Asia Minor as examples of the indented trace, and considers enfiling to be the purpose of similar indentations at Priene.

J. BELOCH, *Griechische Geschichte* i² 1 (1924) 207 n. 3, notices the Dema in connexion with the independence of Eleusis up to the seventh century B.C. (follows Milchhoefer, is cited by Wrede and Nilsson).

S. SOLDERS, *Die außerstädtischen Kulte und die Einigung Attikas* (1931) 104 n. 2, 128–9, questions the linking of the Dema with the early independence of Eleusis (cites Skias and Gardikas and is cited by Wrede).

A. R. BURN, *The World of Hesiod* (1936) 196, connects the Dema with the very early wars between Athens and Eleusis.

R. CARPENTER in *Corinth* iii, Pt. ii (1936) 36 n. 2, allows the possibility of a late dating for rough pseudo-polygonal walling (on the Acrocorinth), quoting the parallel case of the Dema (following Wrede).

M. P. NILSSON, *Cults, Myths, Oracles and Politics in Ancient Greece* (1951) 37, refers the Dema to the early wars between Athens and Eleusis (cites Beloch and Chandler).

A. PHILIPPSON, *Die griechischen Landschaften* i, iii (1952) 854–6, describes the area of the Dema in detail with a brief mention of the wall itself, for which he would accept a fifth or fourth century B.C. date; p. 856 n. 2, E. Kirsten gives references and suggests the possibility of a date in the third century B.C., when on occasions the Eleusinian plain passed out of the control of Athens.

A. W. GOMME, *Commentary on Thucydides* ii. 71–72, note on Thuc. ii. 19. 2, tentatively accepts the pre-480 B.C. dating proposed by Dow on archaeological grounds, but challenges the reliability of the argument from historical probability; cf. also p. 725.

II. DESCRIPTION

A. Topography and design

The screen of mountains lying to the west and north-west of Athens is interrupted by three passes (FIGS. 1 and 2): (1) the southernmost leads from the hinterland of Piraeus to the Skaramanga peninsula on Salamis Bay; (2) in the centre the Dafni pass connects Athens directly with the head of the bay and runs between the sea and Mt. Aigaleos into the coastal plain beyond; (3) north of Aigaleos is a wide gap in the mountain chain, stretching from that range to the Parnes massif. This gap the Dema closes with an artificial barrier.



FIG. I. SKETCH MAP OF ATTICA SHOWING THE ANCIENT FRONTIER DEFENCES

Into the Aigaleos-Parnes gap there intrudes, from the east, the plain of Athens, forming an elevated plateau (150 m. above sea-level), and from the west and at a lower level (up to 100 m.)

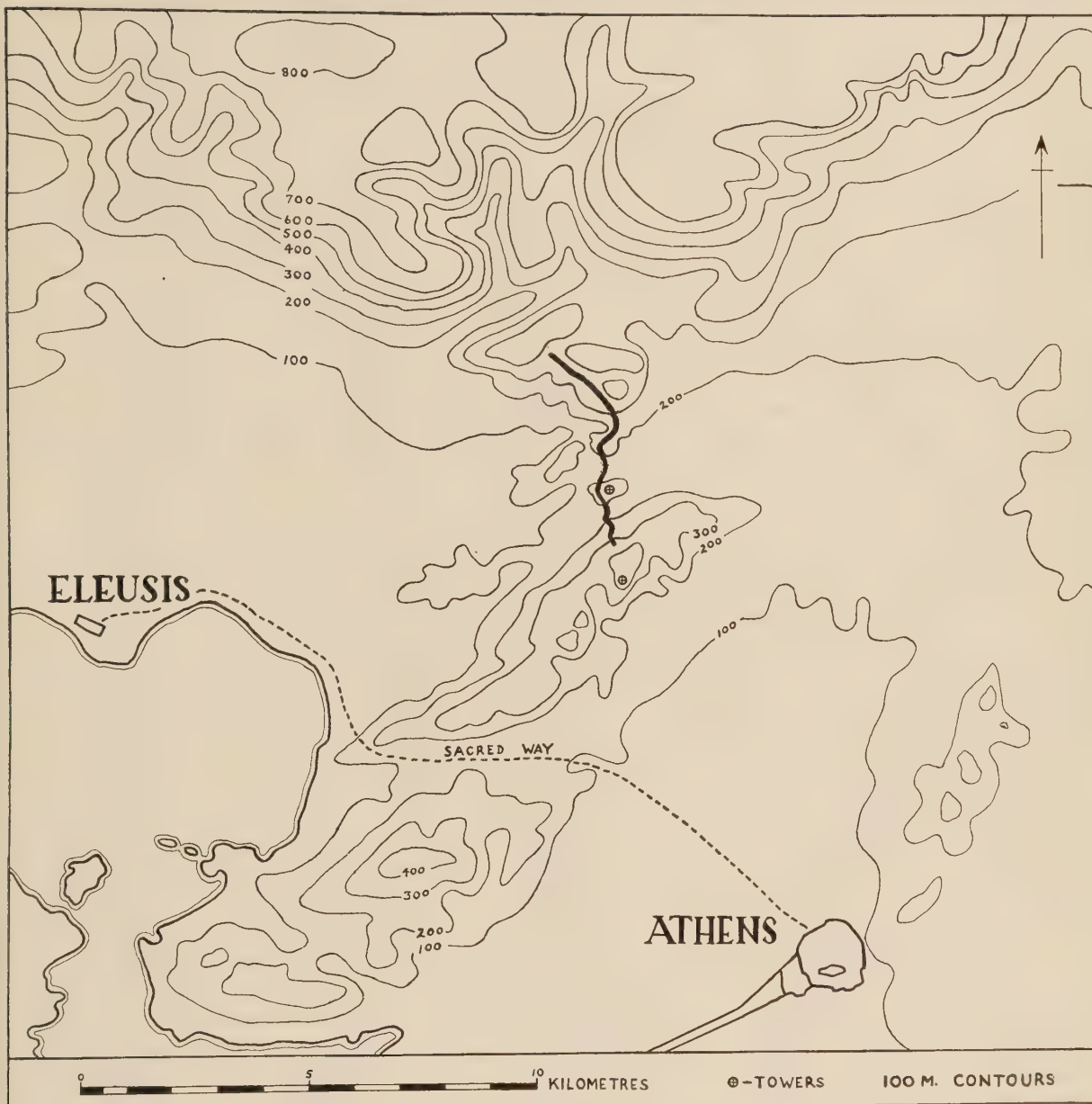


FIG. 2. MAP OF ATHENS AND ELEUSIS

the plain of Eleusis and Thria. Between the plains and at the narrowest part of the gap (PLATE 29) runs a watershed; this rises centrally into two prominent, quite separate hills, from each of which a spur thrusts forward into the western plain (the southern prolonged almost to the coast as a chain of hills). These heights leave three saddles on the watershed and three channels of

approach leading to them. The latter are, from south to north and in order of facility: (1) a valley secluded behind the prolonged south spur yet with a through passage into the open plain near its head, having a gentle slope up to the watershed (175 m.) and a level transition to the plateau beyond; (2) a shorter, narrower, and more sinuous valley, with a steeper gradient to the watershed (170 m.) but again level ground beyond; (3) a broad, blunt, steep *cwm*, forked at its head, the southern branch ending below a slight dip in the crest of the north hill between its two summits, the northern leading through the true saddle (215 m.) between that hill and Parnes, but with a steep westerly ascent and a corresponding descent to the east.

At present there is a striking contrast in appearance between the plains and the hills (PLATE 30). The former are two carpets of cultivated land following the contours and insinuating themselves into the irregularities of the hills. The latter—mountains, watershed, and spurs—form an arid, boulder-strewn waste supporting only aromatic herbs and a few scattered pines. These last and traces of eroded terracing suggest a greater degree of forest growth and cultivation at some earlier date.

The actual site of the Dema within the pass is the line of the watershed. This is the obvious choice for any frontier between the plains of Athens and Eleusis or for a temporary defence of the passage either way. The watershed is the natural divide between the plains; it represents the shortest line that can be held between Aigaleos and Parnes, here 2 kilometres apart, whereas to east and west of it Parnes recedes northwards, widening the gap; and it has naturally defensible terrain.

A defence plan for the western plain could have taken a direct and uncomplicated line along the eastern edge of the watershed from Aigaleos to the south-east flank of Parnes, possessing the advantage of an uninterrupted view across the level plain in front,³ but the disadvantage of a lack of height at the saddles (except at the northernmost of the three).

The Dema, however, represents the reverse situation, namely the defence of the eastern plateau against incursions from the western plain below. In this case the advantage of height at the saddles is secured, but the spurs projecting forward from the defensive line pose a new problem. These could be of advantage to the extent that they impeded the lateral movement of the enemy along the line, canalized his attacks along the easiest approaches, and allowed a corresponding concentration on the part of the defence. Equally well they could be a source of danger if they limited the distant view from the defensive line or its command of the ground immediately in front of it, and gave the enemy a level access to the top of the two hills, neutralizing the advantage of height possessed by these central strong-points. To secure the maximum advantage to itself a defence facing westwards could not necessarily choose a direct and inflexible line.

The Dema is a westward-facing rampart, lying west of and just below the crest of the watershed and following an undulating course, with salients on the spurs and re-entrants at the saddles, from half-way up Aigaleos to far along the south-west flank of Parnes. Measured along the ground its length is 4,360 metres, extending between points some 3,615 metres distant by the map.

The Dema may be divided into two sectors: the first, from Aigaleos to the north saddle (2,950 m.), well preserved and massively constructed; the second, from the saddle to the north end (1,410 m.), poorly built and ill preserved (PLATE 31 *a, b*).

The first sector, the southern, is built as a series of separate walls, overlapping from south to north so as to leave a narrow sallyport aligned obliquely between each length (FIGS. 3, 4). These

³ The isolated knoll of Magouleza lying 700 metres east of the central saddle would not affect the distant view from

the hill-tops or the command of the ground immediately in front of such a line.

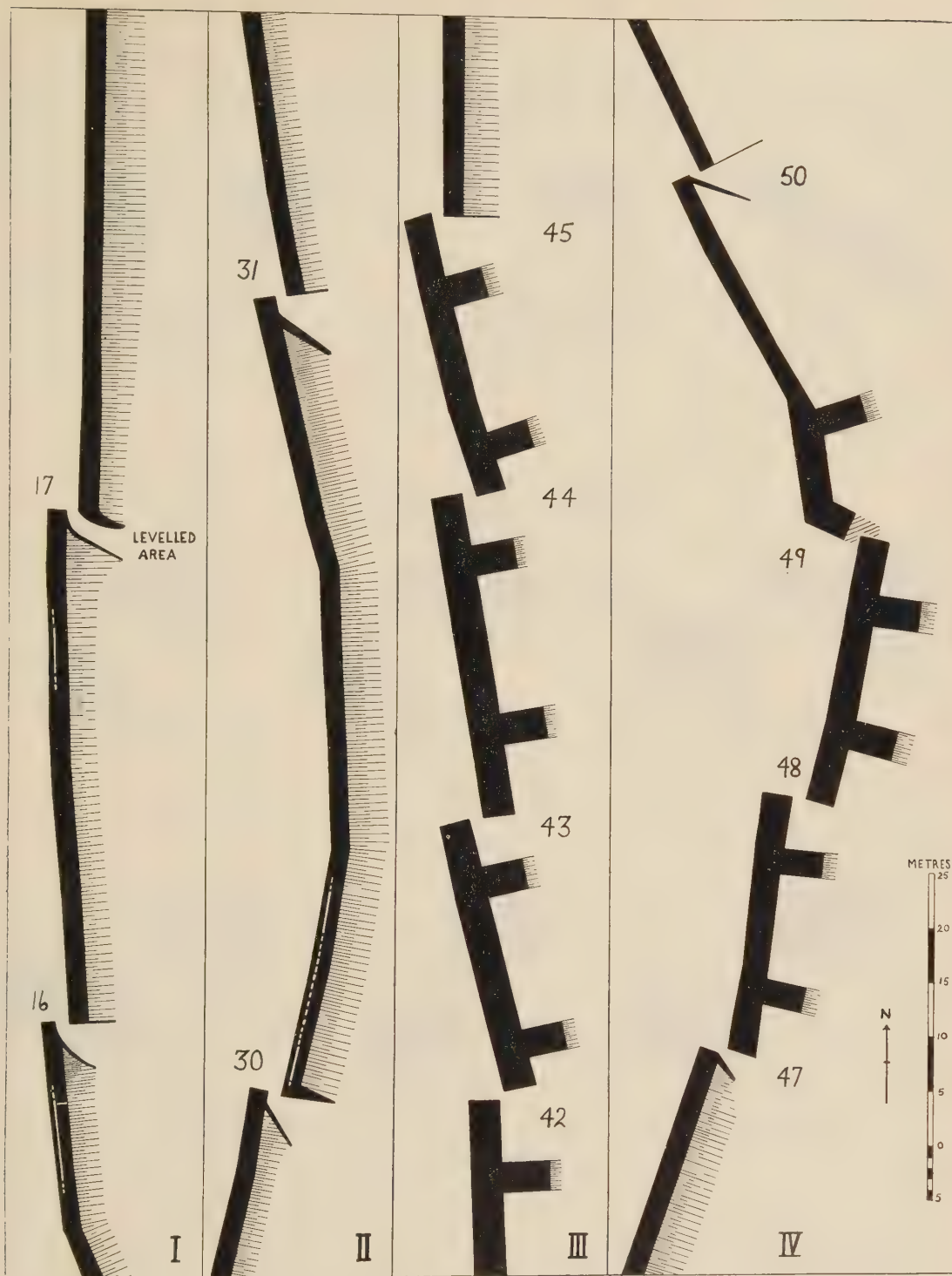


FIG. 3. PLANS OF SELECTED LENGTHS OF WALL

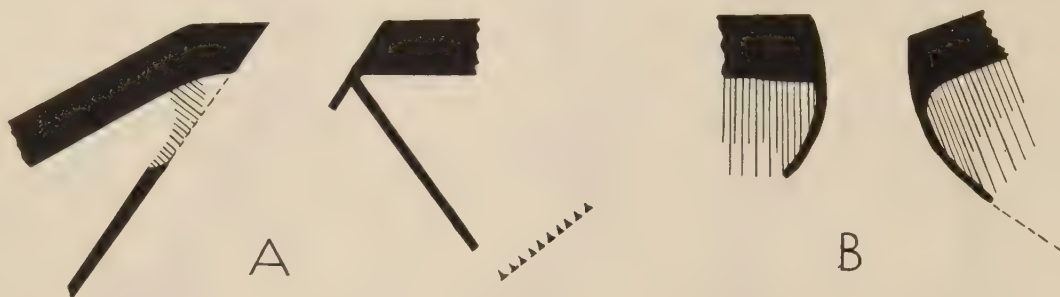
I. Narrow lengths, showing continuous ramp, two preserved lengths of parapet, and sallyports with funnel-exit and curved retaining walls.

II. Narrow lengths: continuous ramp, parapet, sallyports of elbow-form.

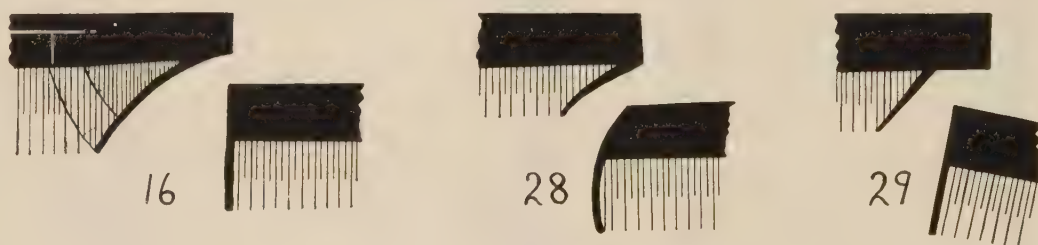
III. Broad lengths: freestanding wall with individually built ramps.

IV. Dema at the foot of Parnes, showing the one irregularity in the system of south-north overlapping, a length compounded of broad and narrow styles, and the start of the continuous narrow wall on Parnes.

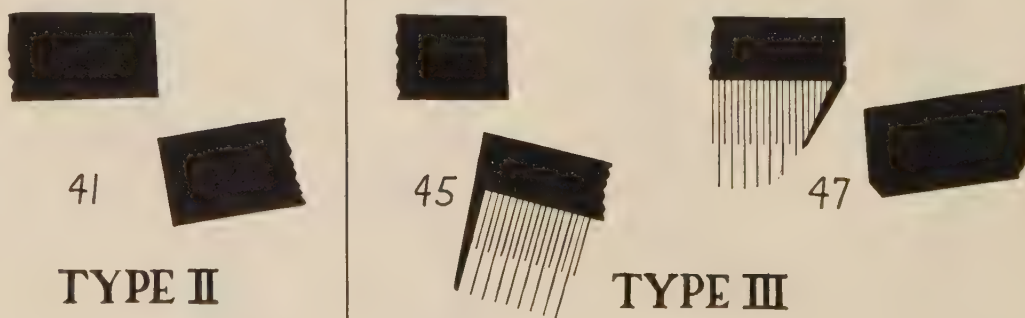
GATEWAYS



SALLYPORTS



TYPE I



0 5 10 METRES

FIG. 4. PLANS OF GATEWAYS AND SALLYPORTS

Types of sallyports:

- I. Funnelled exits between narrow lengths.
- II. Simple exits between broad lengths.
- III. Exits between broad and narrow lengths.

lengths exhibit two styles of construction (PLATE 31 *c, d*): (1) Where the Dema follows sloping ground the separate sections measure between 45 m. and 105 m. (extremes) in length, and between 1.50 m. and 1.80 m. in thickness. They are built with a front face of boulders and worked blocks (continued upwards to form a breastwork or parapet), a rougher rear face, and a rubble fill. Backing each length is a continuous ramp of loose rubble (up to 3 m. or more wide) which extends from ground level, obliquely or horizontally according to the slope of the ground, up

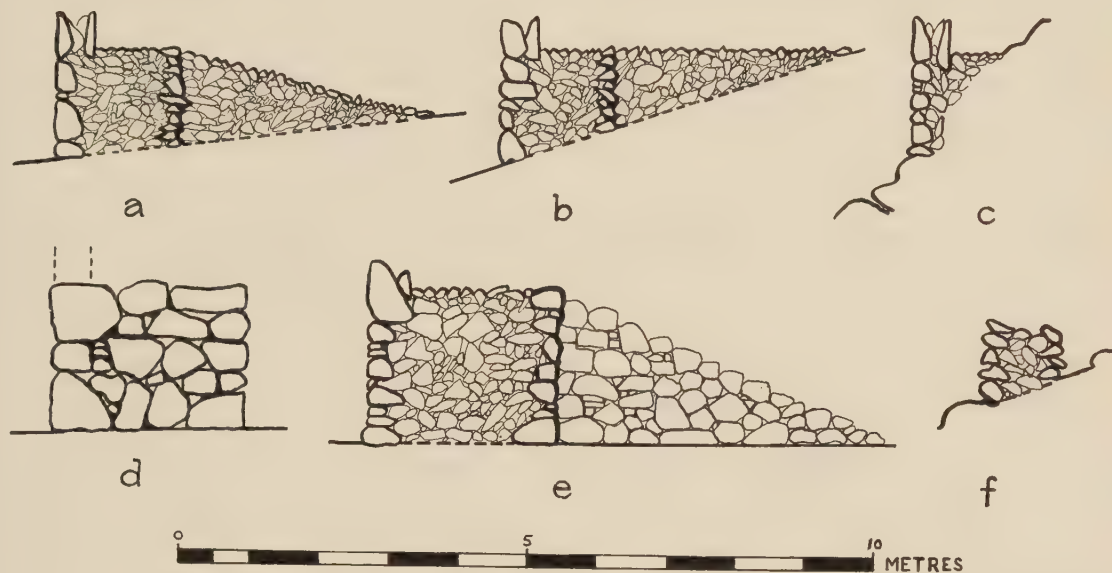


FIG. 5. SCHEMATIC CROSS-SECTIONS OF WALLING

a. Narrow wall with sloping ramp. *b.* Narrow wall with level ramp. *c.* Narrow wall resembling a terrace retaining-wall. *d.* Broad wall: butt-end in elevation. *e.* Broad wall in cross-section with ramp in elevation. *f.* Rubble wall on Parnes.

to the rampart-walk (FIG. 5 *a, b*). The ramps are retained at either end by walls or kerbs, either straight or curved, which give the interposed sallyport the form of a funnelled exit (PLATE 31 *e, f*). In steep places the rampart is very narrow, virtually just a retaining face or terrace wall (FIG. 5 *c*). (2) On level ground the sections of wall are shorter (24 m.–37 m.) and thicker (2.70 m.–2.80 m.) and have both faces free-standing and well constructed (FIG. 3, III and FIG. 5 *d, e*). In place of a continuous backing they each have two separate ramps faced and constructed in the manner of the rampart itself and measuring on average 2.75 m. wide by 5 m. long (PLATES 32 *a, 33 a*). The sallyports are the simple gaps left between the overlapping butt-ends of every two adjacent lengths of rampart.

The entire southern sector is made up of fifty-three lengths of wall, comprising thirty-nine narrow lengths and fourteen broad lengths; there are fifty preserved sallyports and two gateways of larger size.⁴ The preservation in general is good, the wall standing for long stretches up to the full height of its rampart walk, showing this to have been some 1.50 m. to 2 m. above ground level at the front.

In contrast to the southern sector, the rest of the wall from the north saddle to the termination

⁴ The cutting made for the railway (PLATES 29, 30) would have removed another opening; that is, there would have

been originally either fifty-one sallyports and two gates, or fifty sallyports and three gates.

high up on Parnes was designed as a continuous line without sallyports or other breaks, built crudely of rubble to a thickness of about 1 metre and apparently without a ramp at its rear. The actual or intended appearance of the fortification in the first stretch north of the saddle is not obvious, since here it is visible only as ground-level traces as if begun and never finished. Farther up on Parnes are stretches preserved up to 1.00 metre high which show that it was a free-standing wall of rough construction, resembling a mere breastwork (FIG. 5 *f*).

B. Detailed description

It will be convenient now to describe in greater detail the course of the wall and its relation to the ground together with features of special note, taking it from south to north. For ease of reference the sallyports have been numbered 1–50 and the gateways lettered A, B from south to north (PLATE 29); sections of wall are indicated by pairing the numbers of the intervening openings.

The Dema starts half-way up the north-west slope of Aigaleos (241 m.) with a definite, square butt-end; higher than this to the south the wall certainly never went. Though as much as 90 metres in altitude above the crossing of the south valley, the south end of the wall is still 100 metres below the crest of Aigaleos, and between it and the craggier slopes of the peak there extends, for some distance, ground which is fairly unbroken and no steeper than that which the Dema traverses just below the south end.⁵

From this point of Aigaleos a ridge extends towards the south saddle and along this the Dema descends, down its western edge. The wall follows a straight line northwards for four lengths; these are narrow lengths with little sign of a massive ramp (owing to the height of the ground at the rear, which gives the wall a terrace-like appearance), but with traces of parapet, rear face, and rubble-built steps on top, or cross walls in the fill of the wall to counteract the gradient. In the middle of the next section (4–5) the wall reaches and rides over a rocky outcrop on the west side of the ridge and then swings north-eastwards, keeping again to the higher ground; the outcrop is a formidable point and the wall here appears to form the angle of a salient. Immediately north-east of this spur the wall (4–5, 5–6) has been built in parts as a retaining face against steep ground, with a parapet (*c.* 0.60 m. wide) and little backing material; the backing material is visible at one point as a narrow chip-surfaced walk between the parapet and the natural rock (FIG. 5 *c*). Sallyport 5 is of special interest and significance as having a drafted edge to its outermost corner (PLATE 32 *c*, pp. 170, 181 below). The wall (6–7, 7–8) then swings more directly northwards to cross a small watercourse which cuts across the ridge from the south-east. From in front of the point of crossing there runs westwards from the watercourse a rock-cut water channel (*c.* 0.50 m.–0.65 m. wide) visible at intervals as it follows a level course along the contours, for long distances along a terraced ledge.⁶

From the middle of length 7–8, that is, north of the watercourse, the wall is less well preserved (PLATE 30); instead of standing in general to the height of the ancient rampart walk, the front

⁵ It would not therefore be impossible for troops to infiltrate around the upper side of the wall and it is perhaps surprising that the wall was not carried up the slope for another 100 metres. We owe to Professor W. G. Hardy of the University of Alberta the suggestion that the wall ended up against a forest (there are still a few trees on the higher slopes); this would be a natural obstacle to any large-scale movements, though on the other hand perhaps cover for infiltration. Statius, *Theb.* xii. 620, certainly describes Aigaleos as well wooded. See also the next note.

⁶ This ledge and channel is the 'road with incised rut' of

Karten von Attika (Milchhoefer, *Text* ii. 45); that only one rock-cut channel can be traced, and that moreover leading to a watercourse, seems to disprove this interpretation of the feature. The existence of a 700- or 800-metre-long channel leading from a watercourse now dry even in spring raises the question whether such a work would ever have been undertaken if the source had always been as poor, and whether a more permanent flow must not be presumed, indicative of a greater depth of soil and more forest on the slopes of Aigaleos.

face has largely fallen away or been robbed, leaving the fill standing and exposed.⁷ The terrain also changes, levelling out at the head of the south valley; the wall runs, however, along a very slight rise with very much the appearance of a broad terrace, possibly due to the silting of soil from cultivated ground at the rear. The last length before the modern railway (10-Rail) denotes another change, from narrow to broad wall, with traces of what may have been separate ramps, though poor preservation and silting prevent certainty on this point. North of the railway and on a different alignment (indicating probably a lost passageway removed by the railway cutting) is another broad section running across flat ground to the edge of the broad gully of the valley's stream-bed. This section (Rail-11) is the longest of the broad sections (58 + m.), with three separate ramps (the southernmost on the edge of the cutting uncertainly defined); it has been considerably dismantled at one time, and the top one or two courses are not flush everywhere with the lower.⁸ About 13 metres in front of this length, backing on to the edge of the gully, are traces of a large ancient building (22 m. × 16 m.) which had been completely razed to the ground (pp. 171 f. below).

The wall reverts to the narrow style for the re-entrant descent into the ravine and the ascent of the south hill beyond. It may have been carried over the stream by a bridge or culvert; there is on the north bank a high abutment, with at right angles to it a long wall retaining the end of the interrupted rubble ramp. The six lengths ascending the south hill in almost direct line give, when seen from a distance, an excellent impression of the original appearance of the narrow-style rampart. The rather short individual lengths are clearly distinguishable, together with their sallyports and broad, sloping ramps of rubble, not silted up or overgrown. Well-preserved constructional details visible just short of sallyport 16 include a length of parapet, a chip-strewn walk with a step across its width to mount the slope, and an exposed piece of the rear face (PLATE 32 *b*). Sallyport 16 is now the best example of the funnelled entrances, having a deep passage flanked by walls, 0.30-1.60 m. high; these retain massive rubble ramps, of which the southern has a stepped slope up to the jamb (PLATE 31 *e, f*; FIGS. 3, I; 4 *a*). In addition, sallyport 17 is noteworthy for its narrow, curving passageway and for an artificially levelled area behind it where men could gather preparatory to a concerted sally (FIG. 3, I).

As the wall approaches the top of the hill over steeply sloping ground the ramp levels out, forming a broad, stony terrace (FIG. 5 *b*). Here the Dema lies below the flat-topped summit, following a course that allows a clear view over the spur, its westerly extension of hills, and the south and central valleys. On the summit of the hill, some 180 metres behind and out of sight of the highest point of the wall, is the solid base of a circular tower inside a rubble-walled enclosure (PLATES 29, 30 and p. 73 below). This tower lies at the approximate mid-point of the southern sector, where it can be seen from nearly all parts of the field-work and can itself command a panoramic view of the surrounding country, taking in Parnes, Pendeli, the length of Aigaleos, Salamis and the Bay of Eleusis, Eleusis itself, and much of the western plain.

From the top of the south hill the Dema descends in longer sections with a more easterly course into the central valley. It follows a ridge between one natural hollow in front, command of which would be advantageous, and another to the rear, which prevented a satisfactory course higher up, closer to the crest of the central saddle. One sallyport (24) on the downward course is noteworthy for the artificially prepared assembly area behind it, with clear rock-cut sides extending about 10 metres backwards in line with the kerbs of the funnelled exit.

Between the two hills the wall describes a wide re-entrant which forms a great dip in its line,

⁷ Slighting would have left more blocks lying in front of the wall; it seems that many have been removed, perhaps as material for railway embankments close by.

⁸ Disturbances again perhaps to be connected with the building operations on the railway.

most noticeable when viewed from the west. Behind and above, on the very crest of the saddle, is an isolated straight wall of small, partly dressed rubble, approximately 1 metre thick and 150 metres long, and now less than 1 metre high. Its ends peter out indeterminately at the foot of either hill, but from the west appear rather to be shielded by their slopes. If this 'rear wall' is contemporary with the Dema, it may have served as a second line of defence at a vulnerable point where the main line of defence dipped steeply. It is undoubtedly ancient, but its purpose and date are not certain.⁹

Crossing the watercourse of the central valley, presumably over a (now collapsed) bridge or culvert, the wall swings north-westwards sharply, to the first broad gateway (A) on the north bank (FIG. 4). There remains a path through the gate, but there are no clear traces of a broad and terraced road such as would befit an important gateway on this convenient route between the two plains.¹⁰ A shallow rock-cut channel is traceable at intervals outside the wall, in line with the south side of the gate opening, and reappearing within. Here its course is along and up the north side of the central valley, away from its cupped head (a natural collecting ground and *prima facie* an appropriate well-spring for a water-channel) and apparently towards the open saddle. Neither the source nor termination of the channel was traced.¹¹

The course of the Dema over the north hill forms another salient, thrusting forward to climb the shoulder of the westerly, minor summit of the hill and swinging back to skirt the major summit (PLATE 35 *c*). The choice of ground is of particular tactical importance, for the north spur, lying outside the wall, is not a declivity, but rivals the north hill itself in height. Between the spur and the minor summit, however, is a broad if shallow dip which would diminish the effectiveness of a direct assault from the spur. Inclusion of the westerly, minor summit within the defensive line secures command of this dip (as also of the south fork of the north valley) while its exclusion would win a shortened line only to lose at several points the advantages of height, view, and initiative.

Starting this course, from gate A, the wall keeps to the western edge of the shoulder, where it can command westwards the central valley and a lateral branch, and leave safely in the rear a hollow between the shoulder and the main massif of the hill. Three lengths up from A is the second gateway (B). Here detail is well preserved; some 30 metres south of the gate may be seen a length of parapet and a chip-strewn levelled walk (PLATE 33 *b*), while the gateway itself has a deep passage of simple form, with high, slightly curved retaining walls on either side of it and a clearly defined terraced roadway running through it.

The terraced road is traceable eastwards as far as the merging of the virgin watershed terrain into the cultivated plain, and westwards, in a sweeping but horizontal course along the contours (181 m.-174 m.) of the north spur as far as a saddle at its extremity, where the terraced line disappears in a waste of craggy boulders. Below this saddle and on the north side of the spur another terraced road follows the contours (140 m.) north-eastwards, also to disappear but to

⁹ As preserved, the Rear Wall seems too slight and too short to be an effective barrier. But stone-robbing for the sheepfolds built later against its west side would account for a reduction in height and perhaps in length, particularly at the northern end where some general clearing of the ground appears to have taken place. Possibly the wall was never completed. Even so, as seen from the west and from some distance, it still gives the impression of being a well-sited breastwork.

¹⁰ In connexion with the uncertain relation of the Rear Wall to the Dema, it should be noted that the Rear Wall appears not to have had a properly built passageway

through it to correspond with that through the Dema at Gate A. This inconsistency could imply a difference of function and of date; but it might also suggest that there was here, over the central saddle, no formal roadway. The present-day path passes through one of several narrow breaches in the Rear Wall.

¹¹ Possibly related to it is a short length of similar shallow rock-cut channelling noted far down the same central valley, but on the south side a little way up the slope. Correlation of the two would imply the assumption that the channel crossed the natural watercourse at some point, presumably by means of an aqueduct.

have its general direction continued at a lower level (125 m.) by a third length. The interrelation, purpose, and terminations of these roads remain unknown.¹²

The wall continues still in the narrow style to the top of the minor summit, following a low transverse ridge across its front. In this part there are good examples of sallyports of elbow-form (30, 31) and traces of parapet in the intervening rampart. Across the open summit, however, the wall is built in the broad style for four lengths, reverting to the narrow style for the next three lengths where it crosses the dip between the minor and major summits of the north hill, and where the slope again allows a loose rubble ramp to be securely and economically constructed.

Some 450 metres in front of the salient, on the highest slopes of the north spur, lies an isolated, roughly built rubble wall, *c.* 1 m. thick and 130 m. long, now preserved only to the low height of about 0.75 m. The quality of building is comparable to that of the north sector of the Dema (cf. PLATE 31 *b*). This wall may have been contemporary with the Dema and related to it as an outwork.

In the return eastwards from the minor peak towards the north saddle the Dema alternates between broad and narrow styles according to whether the ground traversed is flat and open, as on the summits, or sloping, as on their flanks. The openness of the ground necessitates a formidable defence, and here the rampart is impressively preserved to a maximum height of 2.25 m. Approaching the saddle, the wall adopts the broader construction; there are two normal broad lengths, each with twin ramps; followed by a third, initially broad (FIG. 3, IV). This third length exhibits two departures from the normal mode of construction. First, it breaks the hitherto consistent pattern of south to north overlapping: the irregular section (49-50) projects at both south and north ends in front of the adjacent lengths, having at its south end an oblique return to narrow the broad space that would otherwise represent sallyport 49.¹³ Secondly this length is unique in that it was built for some distance in the broad, free-standing style, as far as its one individual ramp, and was continued as a narrow wall, only 1.65 m. thick, with a rough rear face (still 0.70 m. high) and an oblique retaining kerb at its north end, but left incomplete, without the loose rubble ramp these latter features imply. These deviations seem most reasonably to indicate some change of plan during construction, possibly connected with some sudden emergency, a need for economy, so urgent as to force a premature cessation of work on the wall.¹⁴

¹² The distance over the saddle and the long descent involved seem to invalidate Milchhoefer's suggestions that levering machines were used to connect them. The breadth and careful terracing of the road could certainly imply a provision for more than foot traffic, and stripping of the surface might reveal confirmatory wheel-ruts. In this case the links between the roads would require an equally adequate surface for wheeled traffic, perhaps in the form of a timber causeway or even a stone-built, zigzagging incline, but no traces of such are visible.

¹³ The return, in its present state of rough repair, abuts against the north end of 48-49, although in its original state it undoubtedly stopped short, leaving a sallyport. The lower courses seem certainly to indicate that the return was an original feature, though now the position of the jamb and the width of the sallyport can be judged only with approximate accuracy.

¹⁴ There are various possible solutions for the deviation from the normal overlap: (*a*) The existence of this feature in the original design, due to some overriding tactical need. But the nature of the terrain does not call for the provision of extraordinary safeguards. As a logical termination of the

normal overlap and sallyport pattern, a final reverse overlap (= a sallyport-in-reverse) would be understandable, fulfilling the defensive scheme of sallies by facilitating the re-entry of the last of a series of sortie-parties (see below, p. 168); but sallyport 49 is neither the last sallyport nor the terminal point of terrain practical for sallying tactics. (*b*) An intentional change of plan during construction, designed by the military engineer to improve his original line, which was seen to incline too far eastwards. (*c*) A fortuitous change in plan, necessitated by the failure of working parties to follow the surveyed line, here or farther south.

For the constructional change in mid-length there are two plausible explanations: (*a*) Two working parties co-operating on one length, each to its own technical specifications. The two styles, however, represent neither different ideals of fortification nor the work of different contractors, but adaptations of one simple model to the needs of terrain—which cannot be taken to account for the change here in so short a distance. (*b*) A pressing need for economy or haste during the later stages of construction. An immediate change to the narrow style would save both time (in that

This impression seems to receive confirmation from the appearance of the rampart north of the incomplete sallyport 50. For another 37 metres the wall is continued, unfinished and with reduced dimensions, built of rather small rubble with a width of only 1.50 m. and a maximum (preserved and probably approximately original) height of 0.80 m.; beyond, it is not traceable other than as a foundation. Here we must put the end of our southern sector and the beginning of the northern.

From the north saddle to the shoulder of Parnes the ground rises steadily, but not so steeply as to preclude the need for a strong artificial defence. The Dema here follows a straight continuous course uncomplicated by such defensive accessories as ramps and sallyports. It now exists merely as a one-course foundation, about 1.25 m. wide, or as two parallel lines of stones, while the absence of fallen material suggests that there was never a superstructure.¹⁵ The condition of the remains points again to the belated adoption of an inexpensive, makeshift plan¹⁶ and, following close upon its inception, a total abandonment of the work of fortification.

At the north end of this gradual slope, there are traces of rough rubble walling of terrace-like construction. The wall then climbs the south-west flank of Parnes steeply, levelling out near the top to follow a straight course north-westwards along its face. Here it commands a magnificent view over the Eleusinian plain but is itself so high up on the precipitous slopes as to be beyond convenient approach. Owing possibly to this comparative invulnerability, the wall was built throughout this final sector as no more than a continuation of the breastwork rather than of the rampart, a crude free-standing wall with rubble faces and a fill of smaller stones, about 1 metre wide and (at most) 1 metre high (PLATE 31 *b*, FIG. 5*f*). Only in rare places indeed does the wall appear to have been raised sufficiently for it to have been of practical use.¹⁷ Worthy of notice is the direct manner in which the wall at several points climbs rocky shelves, incorporating boulders in its own line; skirts other crags, leaving a clear intervening foot-path to the rear, perhaps intended for patrolling; and negotiates two deep watercourses. The last faint traces of the field-work extend northwards from the second watercourse up to and behind a natural bastion of rock, and ascend again beyond, to terminate on the open hillside in a scarcely discernible squared butt-end¹⁸

C. *Selected features*

From the general survey we may now select particular features of the fieldwork for closer consideration.

only one worked face need be raised) and building material. That this is a plausible interpretation is shown by the subsequent cessation of work before a ramp could be added to the modified length or the wall farther north be raised up—two indications that the measure taken was insufficiently effective. A further implication is that the programme of construction had been to work from south to north.

¹⁵ It appears from the state of the ground that there has been no significant destruction or stone-robbing due to cultivation, or concealment due to silting.

¹⁶ At its south end on Aigaleos, the Dema employs the overlapping trace on ground equally rough and difficult of approach, and well beyond the probable limits of attacks directed against the south saddle. At this northern end, however, the laying-out line, which is all that the remains

in situ appear to represent, gives no indication of providing for indentations, even so close as this to the saddle.

¹⁷ Even so its erection to a height of even 1 metre is surprising, since it seems that work was discontinued farther south, at the north saddle, where the labour expended on Parnes could have been more profitably employed. The evidence for a south to north progression in building the more important southern sector is not incompatible with the dispatch of a detachment forward to begin work independently on Parnes.

¹⁸ This last stretch from the second watercourse northwards was not noticed and marked in *Karten von Attika* vi. It accounts for the discrepancy between Milchhoefer's estimate of the length of the Dema (4,260 m.) and our own (4,360 m.).

SITING OF THE WALL

The immediately significant feature of the overall ground plan is its meandering course, which must bear some relation to the irregularities of the ground and the tactics of the defence. Two facts previously noted are, first, its line along the forward slope of the watershed, a more commanding position than the summit itself; and second, its divergence from the straight so as to include high ground allowing good observation, and avoid hollows precluding it. There are major deviations like the salients on the north and south hills, and also minor ones involving the exploitation of ridge and outcrop, and the re-entrants at the watercourses. Clearly, command of all potential dead ground was a primary consideration to the military engineer, strong enough to overrule mere economy of length:¹⁹ all the main routes of approach are adequately covered and there is little terrain in front of the wall not directly commanded from it.

CONSTRUCTION OF THE WALL

Local advantages were as fully exploited by the mason as by the engineer. Stone for the wall was gathered together or hewn from outcrops on the site. The wall was founded directly on the rocky surface and built dry, without bonding material, everywhere with a strongly built front face of the largest stones, and a packing of smaller rubble. In the case of the narrow-style walling the lower rear face could be built of rubble in one operation with the packing. Behind this, the continuous ramp of piled rubble buttressed the wall, and, owing to the upward slope of the ground, was held in place against it or at least remained at the angle of rest. Crossing flat ground involved the loss of height at the front and ease of buttressing at the rear. A higher structure was necessary, but here a loose rubble ramp might not bind the wall by its sheer weight unless it were particularly massive. So the wall was more laboriously built as a free-standing structure with two faces, relying for its stability on its careful construction and increased thickness, and mounted, for economy, by individual ramps built in the same manner. The broad style was a variant to overcome a particular difficulty.

The narrow style, the predominant and favoured one,²⁰ was certainly the more economical of time and labour, and possibly of material; by adapting itself to the terrain this style generally required less stone to build than did the broad walling.²¹ But on absolutely flat ground the broad style would be more economical of material than would a narrow walling built with the increased height and the more massive continuous ramp necessitated by the absence of slope.²²

The rampart proper reached an exterior height of 1.50–2.00 m., the narrow style inclining to the lower extreme, since the slope outside gave it a greater effective height, and the broad style to the higher. Above this, it was finished with a wall walk, roughly levelled with stone chips, and a parapet or breastwork. Preserved lengths of the parapet are few and short, and then only

¹⁹ To illustrate this point, it may be observed that the south end of the Dema, the main crests of the two central hills, the three saddles, and the south shoulder of Parnes are almost in direct line; little divergence from this straight line would be required of a 'stone-wall' defence designed to halt a hostile advance at its own foot, by sheer obstruction. That wall would be simple and also shorter (c. 2,500 m. rather than c. 2,950 m.); it would follow the highest ground, and still possess magnificent long-distance views from its two summits. But it would not everywhere command the ground in front.

²⁰ Note the immediate reversion to the narrow style for three lengths (36–37, 37–38, 38–39) in the dip between the flat summits of the north hill.

²¹ A typical 30-m. length of broad wall, built on flat ground to a height of 2.0 m. and a breadth of 2.75 m., together with its two ramps, each 5.0 m. long and 2.75 m. wide, would theoretically require 192 cubic metres of building material. It is more difficult to calculate the volume of the narrow style owing to its variation with the terrain. But an average section of the narrow wall, 30 m. long, 1.50–1.75 m. high, and 1.75 m. broad, with a ramp 3–4 m. wide (cf. FIG. 5) would have a volume of only 140–50 cubic metres.

²² The 192 cubic metres of the broad style (see previous note) would compare favourably with the 255 cubic metres of an equivalent length of this (hypothetical) narrow walling, 2.0 m. high and 1.75 m. thick, together with its heavier buttressing ramp, 5.0 m. broad.

the lowest course (nowhere more than 0.50 m. high) remains.²³ These traces of it show that the breastwork was composed of a double row of stones, back to back, the outer face being a continuation upwards of the front face of the rampart, and the inner being formed by a line of stones held upright in the rubble packing of the rampart (PLATES 32 *b*, 33 *b*, FIG. 5). In some places both faces are preserved; in others, only the front face stands while the rear has been dislodged, leaving, however, a clearly visible line of cavities or a break-line in the rampart packing. Nothing else remains *in situ* to suggest the original height and form of the breastwork, to show whether or not it had merlons and embrasures. The parapet measured some 0.60 m. wide, and if it was continued upwards in the style of its footings, as a wall of dry, roughly hewn and fitted stones, it was probably of simple form. No squared blocks or binding material were found in the debris to suggest anything more, and a high enough breastwork could be made of a dry wall, even of unsquared stone. There is also the possibility that unbaked brick was used as a supplement or substitute.

DIMENSIONS OF THE RAMPART

As the construction of the rampart varied with the terrain, so did its dimensions; exact uniformity is not to be expected in rubble walling that largely adapts itself to the ground. But whereas circumstances occasioned some exceptional features, such as the terrace facing in 4-5 (p. 160 above) and the attenuated section 49-50 (p. 163 above), rough uniformity does occur in those dimensions least dictated by the irregularities of the site. Thus, the horizontal dimensions of the parapet, wall walk, and rampart are less variable than the height of the rampart; likewise, in general the broad style is less variable than the narrow style.

The field-survey record of measurements yields the following average dimensions:

	Rampart		Wall walk	Parapet	Ramps
	breadth	height	width	breadth	breadth
Broad style	2.78 m.	1.86 m.	2.10 m.	0.58 m.	2.78 m.
Narrow style	1.78 m.	1.60 m.	1.16 m.	0.58 m.	

These should correspond approximately to the norm to which the masons built.²⁴

As regards the length of separate curtain walls, the absence of uniformity shows that the main consideration was not rigidity of pattern but the proper relation between design, tactics, and terrain. If broad sections were regularly short, it was because extra sallyports were considered necessary on the dangerously flat ground which required this style of construction. The adjacent narrow lengths are also fairly short. The wider variations in the narrow lengths, generally,

²³ Good examples exist in narrow lengths 13-14, 15-16, 16-17, 18-19, 19-20, 20-21, 23-24, 24-25, 28-B, B-29, 29-30, 30-31, 31-32, 37-38, and a trace in the broad length 32-33.

²⁴ It is tempting to suppose that the builders had in mind some specifications (συγγραφαί—for the term and the method of exposition in public contracts, cf. *IG* ii.² 1665. 2; 1668. 2; *AE* 1900, p. 94, l. 46; and particularly for military building *IG* ii.² 463, with *Hesperia* ix (1940) 66-72 and *AJA* 1950, 337-50). The following units appear frequently in ancient wall construction: ἡμιπόδιον ($\frac{1}{2}$ foot), πούς (1 foot), and πῆχυς ($1\frac{1}{2}$ feet = 1 cubit). It is likely that the Dema was designed in multiples of one of these, and probably in multiples of the foot or cubit, since accuracy to within a

ἡμιπόδιον might have been both pointless and unobtainable in rubble construction. Converted into Greek units (cf. W. B. Dinsmoor, *The Architecture of Ancient Greece* (1950) 54 n. 4, 161 n. 1, 241 n. 1, 247, on the length of the Greek foot), the rampart dimensions might read as follows: broad style—rampart (τείχος) 9 feet (= 6 cubits) broad and 6 feet (= 4 cubits) high, wall walk (πάροδος) 7 feet broad, parapet (ἐπισχῆς) 2 feet thick; narrow style—rampart 6 feet (= 4 cubits) broad and 6 feet (= 4 cubits) high, wall walk 4 feet broad, and parapet 2 feet thick; the broad sections would be broader than the narrow sections in the simple proportions of 3:2. Such might have been the general dimensions agreed upon where terrain made it possible to follow them.

suggests adaptation to terrain—often the breaks between curtains occur where the ground outside is comparatively level.

The narrow sections appear to fall into four groups according to length.²⁵ Sixteen sections measure 70–79 metres, fifteen 45–51 metres, four 97–105 metres, and three 60–63 metres. It appears that where the defensive position was fairly secure from attack the sections could be made long (e.g. the series of four 70–73-metre straight lengths, the southernmost and highest on Aigaleos); where it was vulnerable, they were definitely built shorter (e.g. the series of 47–51-metre sections across the south saddle). It seems certain that the builders provided for longer or shorter lengths according to the requirements of the site, but did not build in stock sizes.²⁶

SALLYPORTS: FORM

Before the use and significance of the sallyports are discussed it will be convenient to give a fuller description of their form.

The term 'sallyports' is used for the gaps which occur between separate sections of rampart and which were certainly intended to facilitate movement from one side of the wall to the other. These openings are not frontal. All the wall-sections overlap from south to north, so that (as viewed from inside the wall, by the defenders) wherever one section ends and another begins, the left-hand (south) butt-end projects beyond and in front of the right-hand (north) butt-end.²⁷ Consequently all the openings are at right angles to the curtain-wall, are screened from view and direct frontal assault by the projecting outer butt-ends, and direct any outward movement obliquely to the right. Furthermore, the openings are narrow and confined, the usual distance between the butt-end jambs being about 1 metre, and the protective overlap is shallow, up to 1 metre but often less:²⁸ the gaps are protected doorways, not gates or corridor-exits.

The actual form of the opening depends entirely on the method of constructing the butt-end on either side, according to the style of wall used. For convenience the openings have been classified into types (FIG. 4). Between narrow sections are found funnel-shaped exits, their sides formed by the revetments of the rubble ramp, in some places a mere kerb, elsewhere a well-built retaining-wall, over a metre high (PLATE 31 *e, f*). These revetments may be curved or straight; where the revetment leading from the outer butt-end is curved, there is usually a curvedly oblique passage-way, and where it is straight, often an angular one of elbow-form (Type I).²⁹ Between the square butt-ends of broad sections are openings which show the basic form, uncomplicated by the passage-walls of an approach-way (Type II). Where broad and narrow sections are next to each other, there are hybrid forms, with a plain square butt-end on one side, and a ramp revetment on the other (Type III).

The openings appear to have been without door or roof. The butt-end jambs are in many places preserved to their full height, but nowhere in the existing remains were indications seen

²⁵ The lengths in metres of individual sections are as follows (measurements are read to the nearest metre): narrow sections: 73, 70, 70, 73, 79, 71, 60, 47, 47, 51, **, 105, 97, 49, 45, 51, 47, 63, 70, 105, 73, 71, 78, 70, 73, 73, 70, 62, 71, 97, 50, 51, 73, 50, ****, 47, 47, 51, *****, 45, 47 (in south-to-north order, with asterisks marking the occurrence of broad sections); broad sections: 34 +, 58 +; 37, 30, 25, 28; 25, 28, 27, 24, 30, 36; 24, 26, ?35.

²⁶ An attempt to convert the measurements of wall sections into Greek would be complicated and not convincing. Any one of three units—the foot, the cubit, or the pace (βήμα = 2½ feet)—might have been the basic unit of length, and it would be impossible to identify the one in use while the

method of measuring and its exactness remain uncertain.

²⁷ The one exception is at sallyport 49, due to the departure from the normal system of overlapping; even so, the opening there would have been oblique and partly screened: see above p. 163.

²⁸ Some broad sections have very shallow overlaps; at one sallyport the butt-ends do not overlap at all and are hardly even in line with each other.

²⁹ The variation appears fortuitous, and may depend on the ground, the material at hand, or the methods of working parties. For similar variation, cf. Philo of Byzantium, τῶν δὲ πυλίδων αἱ μὲν σκολιαί, αἱ δὲ κλίσιν ποιοῦνται (for full references see below p. 168, n. 33).

that lintel-beams had crossed even the highest doorway or that a door or permanent barricade had closed any opening.³⁰

SALLYPORTS: PURPOSE

The purpose of the openings in the Dema's course will become apparent if their identification (hitherto assumed) as sallyports is justified. This can best be done briefly by distinguishing between gateways and sallyports in ancient fortifications. The gateway was essentially an entrance and was as wide as it was safe or convenient to make it. Security was sought in its form, designed to take at a disadvantage a hostile attempt to force entry; often this purpose was achieved by means of a corridor-trap wherein the unshielded right side of the advancing enemy would be exposed to fire from the inner battlements, and the resulting plan necessitated egress from the city obliquely to the left.³¹ The sallyport was essentially not an entrance, but an exit designed for sudden sortie and counter-attack; it needed to be wide enough to permit the disciplined transit of a raiding party without being itself a breach in the defences requiring elaborate protection; preferably it should also be screened from view and attack, so that the defenders could make surprise sallies and do so safely, advancing from behind the cover of the walls under cover of their own shields. The form which guarantees these advantages is, in essentials, a narrow doorway, oblique not frontal, leading outwards to the right.

Clearly the openings in the Dema are of the sallyport pattern—narrow, as for controlled exit; unprotected, being vantage points for initiating offensive action; altogether designed for sortie, possessing screened assembly areas in the rear (with funnel-approaches, rock-cut hollows, or simply level ground behind the rampart) and mouths through which files of armed men could move out towards the right with their shielded (left) side to the enemy front, against the unshielded right flank of enemy formations near the wall.

The implication behind the use of sallyports is that attack is the best defence; so generous a provision of these features in the Dema implies not merely that this principle was recognized, but that the whole tactical scheme of defence was based on it. In detail, this tactical aid enables the defence to counter the enemy's measures by anticipating them, to foil his assault or siege preparations, to break up his formations in the open before the last line of defence (the rampart) is even reached, to attack and withdraw at will.³² In this connexion the need to retain the initiative emphasizes the importance of good observation and command of terrain—a point given full consideration in the layout of the Dema (p. 165 above).

The very number of sallyports may suggest the manner of their use. Provision of a few sallyports at random might leave a sortie-party isolated in front of its own line; provision of many at regular intervals ensures the sortie's safe withdrawal. Rarely perhaps would a party, after encountering the enemy, be able to return by the same route. Indeed the sortie's oblique advance across its own front would prevent this. Rather than turn and retrace its steps, thus leaving its unshielded side exposed to the enemy, the party could more easily continue its line of advance, still under the cover of its shields, and file back through a sallyport farther along the wall.³³

³⁰ Rough walling closes several of the gaps but definitely postdates the original construction; other openings have been blocked by falls of rubble.

³¹ Cf. Vitruvius i. 5. 42 for an exposition of the principle. It is seen in operation, at widely different periods, at Tiryns (Schliemann, *Tiryns* (1886) pl. ii), Stymphalus (Orlandos, *PAE* 1926, 132, fig. 1), and Mantinea (Fougères, *Mantinee et L'Arcadie orientale* (1898) 151-7, pl. viii: hereafter called *Mantinee*).

³² For an apt description of these tactics cf. Onosander (mid-first century A.D.), *Strategikos* xl. 3 (Loeb ed., 1948): καὶ γὰρ οἱ μὲν πολιορκούντες, ὃ τι ἂν μέλλωσι πράττειν, ὁρῶνται τοῖς ἀπὸ τοῦ τείχους, οἱ δὲ πολιορκούμενοι πρόβλημα τὸ τεῖχος ἔχοντες ἀράτοι πολλὰκις ἐκχυθέντες διὰ πυλῶν ἢ μηχανὰς ἐνέπρησαν ἢ στρατιώτας ἐφόνευσαν ἢ, ὃ τι κατὰ χεῖράς σφισιν εἴη, τοῦτο ἐποίησαν.

³³ This use of sallyports is described by Philo of Byzantium in his treatise on city fortifications (ed. H. Diels and E.

GATEWAYS

The two larger openings in the Dema are simple in plan (FIG. 4). Both are wide and frontal (or oblique only to the extent that the passage-ways through the wall are not exactly at right angles to it), and have deep passage-ways, formed by the turned-in ends of the adjacent (narrow) wall-sections, continued backwards as revetments or kerbs. The masonry resembles that of the rampart's front face. Though the gateways are in parts well preserved, there is no sign of any gate-pier, post or hook, bar-hole, threshold, superstructure, or bridge across the passage.³⁴ The southern gate (A) had a straight passage-way with a revetment on the northern, uphill side, and a kerb extending far to the rear on the south; on this lower side the rampart end has been destroyed so that the height of the jamb is not known. The better-preserved northern gate (B) has curving passage-walls, over a metre high, extending well inwards; the northern 6-metre-long revetment may have been originally longer, for its line is continued by a 2-metre-long rock cutting.

These openings, wide and unprotected (in contrast to the sallyports), are gateways serving two main through routes—the southern possibly (as at present) merely a track, the northern a terraced roadway. The relation between these through-passages and the Dema is problematical. One or more gateways through the barrier across the pass would be convenient for normal traffic; it is strange that the only two such openings³⁵ in the entire south sector (2,950 m.) are sited only 230 metres apart, and that they differ so much in purpose, for one serves a natural route, through the central saddle, between the two plains, the other an artificial road, half-way up the slope from that saddle, running apparently only to the end of the north spur.³⁶

The question arises whether one or both gates were incorporated in the Dema design so as to accommodate pre-existing routes, or as large openings in some way connected with the defensive scheme. It is clear that the obvious natural routes between the two plains are through the valley approaches and across the saddles,³⁷ and that an early route (chosen without reference to any military barrier) would take the obvious way. The south gate serves one of these valley routes and could possibly therefore have been built to permit the continued use of the principal pre-existing trackway. This possibility is less likely in the case of the second gate. There the line taken is not an obvious through route, and required at some time careful engineering. While the roadway may have antedated the wall, its scientific construction connects it most plausibly with the building of the Dema, and perhaps with some as yet unperceived military function; it can hardly post-date the fortification, since that would imply that a gate was first built where there was neither roadway nor natural route.

STYLE OF MASONRY

The masonry of the rampart faces shows a great diversity of treatment and appearance. It

Schramm (*Abh. Preuß. Akad., Phil.-Hist. Kl.* (1919) no 12, 1920) vii, viii. 1. 33–35; C. Graux (*Textes Grecs*, 1886) vi. 1–3; Thevenot (*Vet. Math.* 1693) p. 82, ll. 15–26):

*Ετι δὲ πυλίδες πολλὰι καταλείπονται ἐκ τῶν πλαγίων πρὸς τὸ ῥαδίως ἐπεξερχέσθαι, [ἦ] καὶ πάλιν ἀποχωροῦντας γυνὰ μὴ φαίνειν ἐπ' ἀσπίδα ποιοῦμένους τὴν μεταστροφὴν, καὶ τὸν ἐξεληλυθότα λόχον κατὰ τὴν πρώτην πυλίδα κατὰ τὴν δευτέραν συντελοῦντα τὴν εἴσοδον, ὁμοίως δὲ καὶ τοὺς ἄλλους πάντας οὕτω ποιοῦμένους τὰς ἀποχωρήσεις. τῶν δὲ πυλίδων αἱ μὲν σκολιαί, αἱ δὲ κλίσεις ποιοῦνται. πρὸ πάσων δὲ αὐτῶν οἰκοδομήματα κατασκευάζεται, ἵνα δυσέμπρηστοί τε ὦσι καὶ ὑπὸ τῶν πετροβόλων μὴ συντρίβωνται, καὶ οἱ πολέμιοι μὴ πλησιάσωσιν αὐταῖς, ἐκ δὲ τῆς πόλεως ὅταν μέλλωσιν ἐπεξίεναι τινές, μὴ συμφανὲς ἦ τοῖς πολεμίοις. Cf. Fougères, *BCH* xiv (1890) 89; *Mantinée* 159.

³⁴ Based on observation only; but excavation would probably produce little supplementary information here.

³⁵ See above, p. 159 n. 4; the railway cutting farther south is wide enough to have destroyed either a sallyport or a third gate.

³⁶ See above, p. 162. Any westward extension of the road to the plain, inevitable if it were to be a normal traffic route, would necessitate steep inclines quite at variance with the careful contouring of the known course.

³⁷ See above, pp. 155 f. At the present day a railway and a cart-road cross the south saddle, and mule-tracks the central and northern saddles, but the terraced road shows little sign of use.

gives a general impression of rugged rustic strength, which results not from a mere piling-up of unworked rubble but from a deliberate minimizing of technical sophistication. Although in places natural boulders were incorporated in the face of the wall, most of the facing blocks show some degree of dressing. The stone, much of it gathered or quarried nearby, was probably dressed at the wall; masons' chippings were used to level the wall walk and are found scattered in the fill. The dressing had a strictly constructional, not decorative, function, and this was to secure closer fitting of the stones, a vertical wall face, and strong butt-end angles. Many stones have one or more sides smoothed, levelled, squared, or indented so as to accommodate abutting blocks, and front edges showing a rudimentary form of *anathyrosis*. The wall face is not smooth,³⁸ but the 'bossing' is slight and there are no projecting stones which could have hindered the construction of a plumb face or afforded grip for climbing. Butt-end angles are carefully constructed, and many have heavy blocks of squared shape with well-defined corners facilitating exact superimposition. One butt-end (sallyport 5) is particularly interesting, for it has down its outer corner—the only certain example found—a roughly hewn but unmistakable drafted edge (PLATE 32 *c*); this suggests meticulousness on the part of an individual mason in fitting together the corner stones.³⁹

The Dema does not exhibit any particular one of the many masonry styles which developed over a long period in Greek fortification walls,⁴⁰ but rather, apparently, an amalgamation of different traditions. In different parts of the wall extreme variations of stonework may be seen—rough boulder construction (PLATE 33 *c*) contrasting with sophisticated stone-cutting (PLATE 33 *d*). More normal is an alternation between fitted rubble of indefinite style (PLATE 31 *a* is a good example of this random construction) and patches of more definite character. These include indications of curvilinear (Lesbian) (PLATE 34 *a*) and polygonal (PLATE 34 *b*) techniques, producing irregular network patterns, and also of coursing and squaring, with their resultant patterns of vertical and horizontal lines. A coursed series of rectangular blocks is rare (PLATE 34 *c*), but there is a wide use of broken coursing stepped to counteract the slope; of occasional course lines, running with the slope (PLATE 34 *d*) or stepped against it, as bedding for random rubble; of coursing at butt-ends (PLATES 31 *c*, 32 *c*, 34 *e*); and of rectangular and trapezoidal blocks and blocks with one or more angles squared (PLATES 34 *f*, 35 *a*). A further element in the masonry is stackwork and triangular fillers, employed to stop gaping joints (PLATE 35 *b*).

Although there may be some correlation between quality of workmanship and terrain,⁴¹ there is no localization of masonry styles; everywhere squared and curvilinear patterns adjoin and intermingle. This admixture of styles may possibly be accounted for by the use made of men and materials—by the recruitment of many masons and working parties following their own different traditions,⁴² or by the immediate use of natural and quarried stone, with only a minimum of reshaping. The general rusticity of the wall suggests a construction both economical and unpretentious—which in a field-work is not surprising⁴³—but its solidity and craftsmanship indicate also that it was not a hasty or haphazard construction, even though it was left incomplete. It is

³⁸ 'Quarry-faced' would be the term most nearly applicable, cf. R. L. Scranton, *Greek Walls* 21.

³⁹ Professor A. J. B. Wace informed us that he and G. L. Cheesman had also noticed one drafted edge during the course of an earlier investigation of the Dema; cf. *Hesperia* xi (1942) 195, fig. 2 for another view of the same butt-end.

⁴⁰ R. L. Scranton, loc. cit.

⁴¹ Rather rougher work seems to occur in safer areas, and better work at more vulnerable points: PLATE 33 *c* represents

one piece of walling high up on Aigaleos, and PLATE 33 *e* part of one of the mutilated sections across the south saddle; but these are extreme examples and the contrast is not usually as exaggerated.

⁴² Cf. Scranton, op. cit. 12.

⁴³ Aristotle's suggestion that fortifications should decorate as well as defend (*Pol.* 1331^a10) applied to city walls; as it is, the Dema is impressive and suited to its site.

possible, furthermore, that this method of rustic construction represents a particular phase or development of wall building in Attica.⁴⁴

MISCELLANEOUS STRUCTURES

Other structures and sites found or reinvestigated in the course of the field survey are noted here for their possible or previously suggested connexion with the Dema.

A. *Structures on the wall*

The Dema has not remained undisturbed; its parapet and often its wall crest have not survived intact and in places the wall itself has been breached. It has been affected both by damage and by addition to its original fabric. Some of the accretions are obviously modern—such as the extensive sheepfolds built up against the front of the wall (on the south flank of the south hill) or its rear (on the north hill), and rifle-pits and firing positions built on top of or hollowed out of the wall at several points along its length.⁴⁵ Other accretions, poorly preserved, are less clearly modern, and though not necessarily related to the wall design, deserve closer notice. Just south of gate A are two small square enclosures of indeterminate purpose and date. The first, situated between the watercourse and the sharp angle made by the wall's westward turn to the gateway, abuts internally; it is some 3 metres square overall, with rubble walling now no more than 0.50 m. high. The second, lying between the angle and the gate, abuts externally against the foot of the wall; it is *c.* 3.50 m. wide internally, with its rubble side walls (0.90 m. broad) reduced to footings and its front wall obliterated. A better-preserved structure occupies a small shelf on the south shoulder of Parnes, lying 8.50 m. west of the wall which here begins a steeper ascent; the building is about 8.50 m. square and has a low platform (8.50 m. × 5.70 m.) in its northern half, crude rubble walling 0.50 m. thick and still 1 metre high along its north side and the northern halves of the east and west sides, and only traces of terracing in its southern half.

B. *Other walls*

The 'rear' wall and the 'north-spur' wall have already been described (pp. 162 f. above) and are both probably to be related to the Dema. In addition a strange linear structure was traced on the slopes to the rear of the Dema (PLATE 29). Formed by a single continuous line of undressed stones, simply set on or embedded in the ground (nowhere higher than 0.50 m.), this 'ghost' wall runs along the eastern edge of the watershed, well above the limits of cultivation, following a meandering course from the shoulder of Parnes to the south hill. At fairly regular intervals (11–12 m. at the north end, 15–17 m. centrally, and 6–8 m. at the south end), there occur square indentations, 3 metres across, projecting on the western, uphill side towards the Dema and open on the eastern, downhill side; over a hundred of these open square projections can be traced. Other features are the five 'branches' of the 'ghost' wall, zigzag lines of stone running uphill away from the main line, and a 'loop' line, with square indentations and zigzags, extending downhill at the foot of Parnes. The date and purpose of this structure is not known; conjecturally, it might be regarded as some outdated territorial boundary, or as the laying-out line for some abandoned work.

C. *The house*

Remains found on the flat ground north of the railway and 13 metres outside the Dema,

⁴⁴ Wrede *Attische Mauern* (1933) 11 recognizes rusticity as a characteristic of a number of fourth century B.C. Attic walls.

⁴⁵ Inhabitants of nearby Ano Liosia recall that Italian

troops patrolled the line of the Dema during the last war. The rock-cut trench to the east of the south hill may perhaps also be connected with these troops.

opposite sallyport 11, are those of an independent, rectangular structure, *c.* 20 m. $\times$ 16 m. overall (p. 161 above; FIG. 6). The north side, following the edge of the gully, is unbroken, but the south side has been disturbed by ploughing, except for the east and west 'wings', which were founded on rocky outcrops. The plan suggests an open court surrounded on three sides by rooms

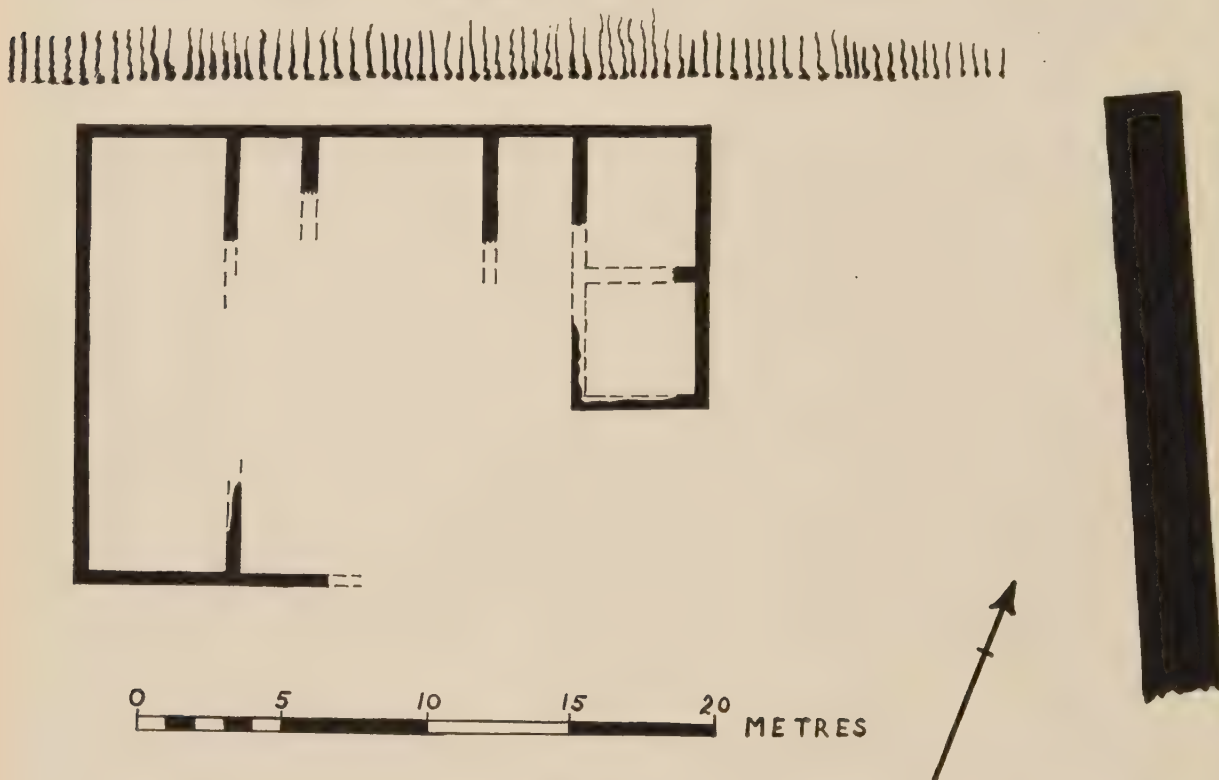


FIG. 6. ANCIENT BUILDING IN FRONT OF THE DEMA NEAR SALLYPORT 11: SKETCH PLAN OF VISIBLE REMAINS

of various sizes and approached from an entrance near the south-east corner—a scheme appropriate to a private house. Both the exterior and the interior walls have an average thickness of 0.45–0.50 m.; they appear to be preserved as a foundation course only, generally flush with the surface and only in parts protruding to a height of 0.50 m. Surface finds include a few tile fragments and sherds (p. 184 below).

D. 'Lager'

About 3,000 metres west of the Dema on a crest of the south spur is a large fortified enclosure which has been related to the Dema as a possibly hostile encampment.⁴⁶ It is roughly oval in shape, measures 140 paces by 70 paces, and is defended by a wall of rough, undressed, dry rubble, built originally with vertical faces; this is now ruinous but in places suggests a width of 2.10 m. There were towers at irregular intervals along the wall; one, sufficiently well preserved to be measured, was square, being 4.10 m. wide and projecting 4.10 m. from the outer face of the wall.

⁴⁶ Curtius and Kiepert, *Karten von Attika* vi (marked 'Lager'); Milchhoefer, *Text* ii. 45; Dow, *Hesperia* xi (1942)

207. The remains were visited by the Director of the British School and J. E. Jones.

Inside the enclosure are stone foundations, particularly near the highest point of the hill, where there are substantial footings of rectangular plan. Scattered around are many red- and black-glazed tile fragments and also some sherds; these include coarse ware and a few poor red- and black-glazed sherds and appear from their general character to belong to the fifth or fourth century B.C.

From the eastern end of the enclosure a ruined dry-rubble wall, about 1 metre thick, runs directly down the southern slope of the spur, terminating at the edge of the cultivated land in the valley bottom. On the slopes there appear to be more terrace and foundation walls.

The character of the remains suggests that here was a small permanent settlement, possibly a scattered one with its own fortified refuge, perhaps one of the small Attic demes.

E. Circular towers

Two towers must be taken in association with the Dema, the first for its proximity to the wall, the second for its similarity to the first.

The Wall Tower. The tower on the summit of the south hill (p. 161 above) was circular and set off-centrally within an elliptical enclosure (PLATES 29, 30).⁴⁷ The enclosure wall, built roughly of small rubble (1.30 m.—1.70 m. thick) appears from faint traces of front and rear faces to have been a freestanding wall, but from the scantiness of the fall to have been only a low barrier. The enclosed area (c. 30 m. east-west and c. 20 m. north-south) is uneven and rocky, with no traces of subsidiary structures inside it. At its western end, founded on outcrops, is the tower—now a solid circular base built of dry rubble, c. 7.50 m. in diameter and preserved to a height of c. 1.50 m.; the masonry is rough and poorly fitted, comparable in appearance to the poorest work in the south sector of the Dema.⁴⁸ Fragmentary roof-tiles found around the foot of the tower indicate that it was roofed, but the scanty stone fall makes it improbable that it continued appreciably higher in stone. The remains *in situ* suggest that originally the tower had been a fairly lofty structure, based on a solid stone drum and built upwards to a further height of one or two stories of perishable material, mud brick or timber, and roofed with tiles; it must have been entered at first-story level by steps or a ladder.

This tower appears to have been an ancient military observation post and signal tower, and one, moreover, closely associated with the Dema as the headquarters of the defended zone.⁴⁹ That the tower could have had only a military function seems clear from its simple construction, its isolation, its position on the highest point in the pass, and its command of long-range views. Our association of the tower specifically with the Dema then rests on its proximity and the similarity of its masonry, its wide command of the rampart's course, and the evident need for a command post to direct operations. The Dema represents one general defensive scheme adopted for the whole pass, based on fluid tactics of counter-attack along a very wide front; it could not operate properly without an effective supervision, exercised from some central vantage point. The tower is the one point behind the wall which commands the greatest length of its undulating course, and was therefore suited for the observation of any hostile advances, and the signalling of local counter-attacks; for a Dema headquarters it was the best (and only) site. This consideration makes it unlikely that the tower could have been built significantly later than the wall. It is possible that the tower long preceded the wall and was later reused as its headquarters. A

⁴⁷ Gardikas, *PAE* 1920, 68; cf. Dow, *Hesperia* xi (1942) 206–7, fig. 13 for an impression of the size of the round base of the tower.

⁴⁸ Some disturbance has been caused by the hollowing out of the fill, as if for a rifle pit (see p. 171 n. 45). For the rest, the fill appears to be original and homogeneous with the

face. It is not due to the collapse of a hollow structure, for the packing inside is solid to the full height of the facing, while outside the fall is scanty; furthermore, there is no trace of a doorway at ground level.

⁴⁹ Noted earlier by Gardikas and Dow, see n. 47 above.

closer connexion, however, seems probable, since both wall and tower appear (as far as field-observation reveals) to have had only one period of construction and use—which would suggest that they are contemporary and part of a single plan.

The Aigaleos Tower. Almost directly south of the Wall Tower, set upon the easternmost and highest summit (452 m. above sea-level) of Aigaleos (PLATE 35 c), is a structure of very similar plan and construction.⁵⁰ It is set at the higher south end of the summit, near the edge of a precipitous slope. The field of vision extends around in a wide circle, taking in the island and bay of Salamis, Eleusis and its hinterland, Parnes and the crags of Phyle, Pendeli, Hymettus, and all the plain between, together with the eastern end of the Dafni pass and the mountain beyond it; Athens lies below in full view, as if at the very foot of Aigaleos.

The ruins are again those of a drum-like structure within an enclosing wall (PLATE 35 d). The solid base, c. 5.50 m. in diameter and still c. 1.50 m. high, appears to be better built than that of the Wall Tower, perhaps owing to its more exposed position.⁵¹ The face is of dry rubble, dressed and carefully fitted, predominantly squared and coursed. The enclosure wall is much destroyed, but the fall and traces of facing suggest a low rubble wall probably of concentric plan (though it appears possible, from the lie of the fall, that the enclosure had somehow been divided, forming an abutting annexe on the west side of the tower). Found all round were fragments of roof tiles, similar to those at the Wall Tower (see below, p. 186), and some sherds. The very solid round base and the tiles again combine to suggest a round tower, with a solid ground story, roofed, and entered probably by some form of outside staircase or ladder.

In their present state of preservation the Aigaleos Tower and the Wall Tower are not inter-visible; but as an observer standing on the summit c. 100 metres north of the Aigaleos Tower can see both towers, it is probable that when they stood at full height communication between them was possible.⁵² It follows, from the choice of site, that if the two towers were intended to inter-communicate, the function of the mountain-top tower was to receive messages from the pass area (if necessary, by sentry and runner) and transmit them to Athens.⁵³

Intercommunication between the towers must be presumed from the similarity of structure, and also from the lack of other verifiable signal towers (see text below) which could be related by position or plan to the Aigaleos Tower and render its otherwise isolated position understandable; signal towers rarely occur as isolated examples. The design of these two towers cannot be paralleled from known sources:⁵⁴ this reinforces the impression that the two structures belong

⁵⁰ Leake, *Demi of Athens* 143; Milchhoefer, *Text* ii. 44; Gardikas, op. cit. 70; Wrede, op. cit. 43.

⁵¹ The top of the structure has been surfaced with concrete, and a trigonometrical point has been erected upon it; but (as at the Wall Tower) the height of the base, the scantiness of the fall outside, and the absence of a ground-level doorway indicate that the packing of the base is original. Rough stone steps abutting on the eastern side are probably modern, erected for convenient access to the trigonometrical point.

⁵² If the figures and contours of *Karten von Attika* vi may be trusted, it can be calculated that the towers would be inter-visible if they had been originally 15–20 metres high. This would give a height : diameter ratio of $2\frac{1}{2}$ or 3 to 1, which accords moderately well with such figures as are available for towers founded on free-standing walls (*Hesperia* xxv (1956) 135). Towers founded on solid-stone platforms would very likely be as lofty as those founded on ring-walls (*BSA* xlix (1954) pl. 5 b illustrates a well-preserved round tower, 7 m. in diameter and c. 17 m. high, built on a ring-

wall of a single thickness of ashlar blocks). This calculation is in itself no proof, but tentatively suggests that direct inter-communication between the two towers was practicable.

⁵³ Cf. Polybius x. 44–47 for some methods of signalling in antiquity.

⁵⁴ Published examples of towers, particularly round ones, associated with enclosures, seem to differ in siting, construction, and purpose; many occupy sites with little command of terrain, are hollow and entered at ground level, have other buildings associated with them, and may have had domestic, manorial, or industrial functions (J. H. Young, *AJA* lx (1956) 51–55; *Hesperia* xxv (1956) 122–46, with full references to other publications). Round towers with solid bases and enclosure walls have not yet been observed elsewhere or not distinctively recorded. Other towers in Attica, whether farm towers or military towers, are not of this type, but are either rectangular, or round but hollow, based on ring-walls. The closest parallels available are Plakoto in Attica (Chandler, *JHS* xlii (1926) 14–15; Wrede, op. cit. 34, 35, fig. 8, 57, pls. 92, 93) and

together as contemporary elements of one defensive scheme, the Wall Tower built to control the pass, and the Aigaleos Tower to report back to Athens and for long-range observation.

Other towers. Other 'watch tower' and 'blockhouse' sites have been identified by previous commentators, who postulate a whole series of watch towers extending along Aigaleos.⁵⁵ On investigation, the sites on Aigaleos and that on the westernmost tip of the south spur of the Aigaleos-Parnes watershed (pp. 153 f. above)⁵⁶ prove to be not towers at all, but cairns of loose stones, or small low-walled enclosures of indefinite date—in no case proper towers comparable to the two described above. On the west point of Aigaleos, overlooking the Bay of Eleusis, there are ruins of an ancient building, much modified by occupation at various times between antiquity and the last war; it has yielded a few coarse sherds of ancient but indefinite date. The evidence from Aigaleos therefore suggests that two towers only, the Wall Tower and the Aigaleos Tower, are to be directly connected with the Dema. It remains possible, however, that these had further connexions; the existence of circular towers north of the Dema near Chasia village⁵⁷ and on the summits south of the Dafni pass⁵⁸ has been noted by early travellers, but could not be verified.

III. INTERPRETATION

It remains to state some conclusions about the design and function of the Dema, and then (in a separate section) to attempt to date it.

The Dema was built as a military field-work to bar the Aigaleos-Parnes gap and control traffic through it from the plain of Eleusis to the plain north of Athens. Included in the same scheme of defence were two signal towers, one to command the pass itself and the other to connect the defended zone directly with Athens.

The entire length of the Dema and both towers have to be seen as the product of one single building operation.⁵⁹ It can be further argued that the one structural period was short, and that the work was abandoned before the fortifications were put to serious use. This is suggested by the unfinished state of the rampart at a vulnerable point, where otherwise some form of breast-work would have been thrown up. The towers were roofed, and so probably completed. Nevertheless, the scantiness of the sherds might imply that if they were manned at all, it was for only a brief period.

To suggest an explanation for the abandonment or neglect of the whole work is beyond the compass of this section and would lead to unlimited speculation. But the ultimate fate of this grandiose scheme does throw some light on its function as conceived by its authors. The Dema could not have been deliberately planned as a permanent frontier, for it is set within the confines of the Athenian state,⁶⁰ nor as an intendedly permanent barrier between opposed factions within

Nemea Station tower in the Peloponnese (*AJA* xliii (1939) 80–81, fig. 1). Plakoto is indeed a round watch tower, set within a (rectangular) enclosure and upon a peak, built with squared stone similar to but better than the masonry of the Aigaleos Tower, and entered at first-floor level; but it is ring-walled and hollow inside down to the ground. The Nemea Station tower is circular and has a solid platform, but this appears to be a terrace with a battered slope rather than an upstanding solid drum.

⁵⁵ Curtius and Kiepert, *Karten von Attika* vi; Milchhoefer, op. cit. 44; H. Lowry and E. Smith, 'A Survey of Mountain-top Structures in Attica' (*Unpublished Papers of the American School of Classical Studies at Athens*, 1954) 39–40 and App. iii.

⁵⁶ Marked as a tower on *Karten von Attika* vi.

⁵⁷ Leake, op. cit. 125; Chandler, op. cit. 5.

⁵⁸ Leake, op. cit. 143; Milchhoefer, op. cit. 14; *JHS* ii (1881) 122; Gardikas, op. cit. 70.

⁵⁹ Differences of quality in the Dema need only indicate divergences in tactical needs, and a hasty relapse during the building from good work to poorer; cf. pp. 163 f. above.

⁶⁰ This consideration is perhaps not absent from interpretations of the wall as a frontier-work between a territorially limited Athenian state and an independent Eleusis (R. L. Scranton, op. cit. 41–42; so also Beloch and Chandler, p. 153 above; Milchhoefer, *Text* ii. 45, attributes the wall to the same early period but precludes its use as a permanent boundary). The wall should be regarded as primarily a tactical defence and as not essentially a terri-

Attica,⁶¹ for an expected permanence cannot be easily reconciled with an immediate abandonment. The Dema is a result, not of 'peaceful co-existence' and a consolidation of disputed possessions, but of a war crisis and a threat of invasion. The particular danger, although it may not have been immediate, demanded strong counter-measures. The wall was to safeguard Athens in a campaign and was not thrown up for a single pitched battle. The massiveness of the work, the careful fitting of the masonry, the levelling of areas behind the sallyports, and the very provision of watch towers, suggest an organized labour force working methodically and without undue haste.

Further understanding of the intended military use of the Dema may result from a comparison with other fortifications. Parallels may be looked for both amongst field-works essentially of the Dema type—barrier walls drawn across country, that is, linear walls as distinct from circuit walls—and, for similarities of detail, amongst ancient fortifications in general.

Examples of ancient field-work walls are few and not well recorded. Those of which anything is known do not appear to represent one phase only in ancient warfare or to belong architecturally to one type. Historically their range is wide; barrier walls are recorded as having been built at different times and as having been renovated at need, as the following instances show. In the archaic period a linear wall was built by the Phocians to bar the pass of Thermopylae.⁶² In the mid-sixth century B.C. Miltiades the Athenian built a wall to separate the Chersonese peninsula from the mainland.⁶³ In 480 B.C. two walls were erected to hinder the advance of the Persian invaders; at Thermopylae the Phocian wall was reconstructed,⁶⁴ while across the Isthmus of Corinth a defensive wall was thrown up for the first time.⁶⁵ In 425 B.C. the Athenians built defensive walls to seal off the two peninsulas of Pylos⁶⁶ and Methana;⁶⁷ the erection of walls and earthworks of various kinds was not uncommon during the Peloponnesian war.⁶⁸ In 378 B.C. linear defences of an apparently novel type were constructed, probably by the Athenian general Chabrias, to close the southern passes into Theban territory and to defend its most fertile parts.⁶⁹ In 323 B.C. Leosthenes the Athenian blockaded Lamia by means of a ditch and a wall, possibly that noted near Stylida.⁷⁰ In 207 B.C. the Aetolians constructed a wall and ditch, once more to bar Thermopylae.⁷¹ Clearly, linear walls as such were not confined to any one particular period of ancient warfare,⁷² and may therefore be expected to show many dissimilarities. Architecturally there were differences of material and design. The original Phocian wall was presumably built, in part at least, of stone, for it was still traceable in 480 B.C. The first Isthmus

torial boundary; consequently its position between Athens and Eleusis need neither imply a limitation of the former's territory and enmity towards the latter, nor compel its attribution to a period when these two conditions were fulfilled.

⁶¹ Two occasions have been suggested, both based on the assumption of hostility between those in control of Athens and secessionists at Eleusis. Skias (p. 152 above) suggested the period of the Thirty Tyrants, and Kirsten (see Phillippson, p. 153 above) any one of the recurring occasions during the third century B.C. when Eleusis was separately governed. Both suggestions are valid to the extent that emphasis is laid on a conflict existing or impending between forces east and west of the Dema, rather than on their mere separation.

⁶² Hdt. vii. 176.

⁶³ Hdt. vi. 36; the wall would have been as long as the isthmus is wide, that is, 36 stades or about four miles long.

⁶⁴ Hdt. vii. 176.

⁶⁵ Hdt. viii. 40, 71.

⁶⁶ Thuc. iv. 3, 4, 13.

⁶⁷ Thuc. iv. 45, 2.

⁶⁸ Many walls were erected as part of siege works, as at Syracuse, but such walls of circumvallation are better not considered here in connexion with linear walls of a defensive kind.

⁶⁹ Xenophon, *Hell.* v. 4, 9–10, 38–42, 49.

⁷⁰ Diod. xviii. 13, 3.

⁷¹ Polyb. x. 41, 5.

⁷² Among linear walls in Greece are structures which do not belong to the classical or Hellenistic periods: both Roman and Byzantine periods are represented in the East Wall at Thermopylae (Grundy, *The Great Persian War* 291; Y. Béquignon, *La Vallée du Spercheios* 48; *AJA* lxii (1958) 210 n. 64, noting several walls at Thermopylae); the medieval in the walls near Cencreae (Fowler in H. N. Fowler and R. Stillwell, *Corinth* i. 1, 104–5); and the Turkish period in a high rubble-and-mortar wall with rounded bastions, parapet, and loop-holes, which crosses the long peninsula running eastwards from the port of Megara towards the north-west corner of Salamis.

wall was built of stone, timber, bricks, and sand; its plan is not known. The remains now *in situ* represent later reconstructions which appear, certainly in some parts, to have had little similarity to the Dema in construction and tactical use.⁷³ The wall at Pylos was built of stone with mud mortar or filling; it was probably built as a static-defence line, strong enough to withstand an assault not supported by siege engines. The defences of Leosthenes consisted of a wall and ditch, and those of the Thebans and the Aetolians of timber stockades and ditches. The difference in building material does not automatically disqualify the latter from comparison with the stone-built Dema; besides a general similarity of function, the Theban stockades appear to have had one very definite characteristic in common with the Dema—there were openings in the stockade to enable the defenders to sally out. Two stone-built linear walls, that barring the middle pass of Thermopylae and that near Stylida, deserve mention as having indented traces resembling the Dema plan, but without sallyports.⁷⁴

Before searching for closer parallels to the Dema among ancient fortifications generally, it would be proper to re-emphasize the difference between the Dema and city walls—the former a stone-built field-work, and the latter complete circuits which could not be turned, last lines of defence to be taken only by frontal assault or formal siege, and built to withstand them. Differences of dimension and elaboration are therefore to be expected, and perhaps also differences of defensive theory.

The most characteristic feature of the Dema, for comparative purposes, is its systematic use of sallyports. The best available parallel appears to be at Iasus, where the high, barren hinterland of the island city was enclosed with a long wall.⁷⁵ This wall was some 2,500 metres long, followed a meandering course over the hills, and was built with an indented trace, arranged as at the Dema, with a sallyport in each short flank, opening outwards to the right. It was, however, more elaborate than the Dema: the wall was much higher, so that the sallyports were posterns set into the short flanks of one continuous structure, rather than gaps between separate sections of wall; moreover, there were rounded projecting towers alternating with every two indentations, each tower having three or five loop-holes and two posterns, one each side at the junction with the curtain wall. Altogether, there were sixty-eight sallyports, of which thirty-two were in the indentations in the curtain and the rest in the eighteen towers. Sallyports and towers were disposed at irregular intervals according to the ground, though many towers were about 90–100 metres apart and some sections of the curtain regularly as short as 30 metres. The area within this fortification was not occupied and the wall was evidently a forward line of defence, commanding tactically important ground and exploiting for this purpose the techniques of enfilade and sally.

Gortys in Arcadia is another, if less impressive, parallel.⁷⁶ There the circuit included three

⁷³ Fowler, *op. cit.* 55; *BSA* xxxii (1931–2) 68–90.

⁷⁴ The wall at Thermopylae must be on or close to the line of the Phocian wall, and has been identified as that fortification (Grundy, *op. cit.* 288–9; Béquignon, *op. cit.* 46–48, 240–1; *AJA* xliii (1939) 699–70; Marinatos in *VI Internationaler Kongress für Archäologie, Berlin 1939* (1940) 333–41). It ran down a spur of high ground to the sea so as to bar advance from the south. Starting from a square tower on the spur, the wall followed a zigzag course along the south edge of the ridge, was some 3 metres thick, and had (at least) two rather narrow gates. These remains represent more than one period of construction. The wall near Stylida likewise ran down from high ground towards the sea, having indentations formed by alternate 12–18-m. long curtains and 3-m. long offsets or flanks; the wall was 3 m. thick and strongly built with inner and outer faces of

regular, hammer-dressed trapezoidal masonry (Béquignon, *op. cit.* 294–5, 298–9, pl. xiv; where the wall is identified as Leosthenes' wall, built to blockade Lamia. The distance from Lamia and the careful finish of the masonry suggest that the structure may not be this field-work, but a more permanent fortification. But its style does indicate a date in the late fifth or fourth century B.C. (Scranton, *op. cit.* 85–98)). In the present state of knowledge, neither wall throws much light on the tactical use of the Dema; their plans indicate that importance was attached to enfilading fire but not particularly to sallying.

⁷⁵ Texier, *Description de l'Asie Mineure* iii (1849) 142–3, 147–8, and pls. 147–9; Judeich, *AM* xv (1890) 137, 144–53, pl. iii; F. Krischen, quoted in *AA* xxviii (1913) 476; G. Guidi, *Ann.* iv–v (1921–2) 346–50.

⁷⁶ R. Martin, *BCH* lxxi–lxxii (1947–8) 85–92.

frontal sallyports set close together in its north-west sector, and indentations on the south side and notably on the north, where the trace was systematically arranged as alternate curtains, 11–13 m. long, and flanks, 2–2.60 m. long; the circuit apparently represents more than one phase of building.

At Miletus the multi-sallyport plan was elaborately developed for the greater security of a city under siege.⁷⁷ The peninsular site was defended on the sides facing the sea by a continuous wall, in many places indented (*à crémaillère*) and serrated (*à tenaille*), but across the isthmus by a rampart pierced with sallyports, so as to command an open expanse of flat ground. This cross wall was built as a series of eight curtains, 55–65 metres long, disposed from left to right as at the Dema, with high square towers projecting at their outer extremities and sallyports intervening between the curtains. The curtains had internal galleries and the towers mounted ballista batteries.

Finally, Mantinea provides an example of the use of multiple sallyports not associated with the overlapping or indented trace, and shows that the two features were not inseparable elements of wall design.⁷⁸ The general plan of the walls suggests an ingenious adaptation of the overlapping trace for the better protection of gateways (cf. p. 168 above), but the sallyports were found in association with the projecting square towers of the circuit, and only on the east side, where in a total length of 1,350 metres there were at least thirteen sallyports. These openings were set in the side walls of the towers, so disposed as to have an elbow-form and an exit leading out to the right. In one section of curtain, such posterns occurred in every tower, at c. 25-metre intervals; in a second section, in alternate towers; and in a third, less regularly.

These, then, are the best available parallels for the systematic employment of sallyports in wall design.⁷⁹ But some diversity of function may be suspected. It would appear that the defence at Iasus relied on general skirmishing and defensive action in the open as the best strategy on a wide front; at Miletus it resorted to sorties on the one vulnerable front to supplement the deterrent effect of massed artillery bombardment on siege preparations; and at Mantinea it introduced sallyports to counter particular local dangers.⁸⁰

The general use of sallyports in city walls implies familiarity with the offensive and defensive role of torsion artillery.⁸¹ Lofty battlements and 'stonewall' tactics were no protection against these weapons; catapults swept the parapets, giving covering fire to the assault pioneers, and ballistas pounded the walls from a safe distance. To neutralize these tactics, the defence needed to mount ballistas in high towers, so as to out-range and destroy the enemy batteries and siege works, and even to carry the offensive to the enemy lines by means of sorties, to harry the men and damage material. This principle was stressed by ancient writers familiar with the use of artillery in siege warfare, and it is also to be seen in operation, fully developed, at Miletus, at Selinus,⁸² and at Syracuse, in the elaborate structures of the fort of Euryalus.⁸³

Yet it is doubtful whether multiple sallyports are to be identified exclusively with the use of torsion artillery against fortifications. Certainly, in city walls they imply a modification of the old idea that high walls were a sufficient security in themselves, the citizens impregnable within

⁷⁷ A. von Gerkan, *Miletos* ii. 3, *Die Stadtmauern* (1935) 53–80, 124–6, pls. i, xiv, xvi.

⁷⁸ G. Fougères, *BCH* xiv (1890) 65–90; *Mantinee* 130–61.

⁷⁹ Sallyports or posterns occur in many fortifications, but rarely so numerous and systematically; cf. Samiko (*Hesperia* vi (1937) 526, fig. 1).

⁸⁰ For these dangers see Fougères, *BCH* xiv (1890) 88–90; *Mantinee* 160.

⁸¹ Philo of Byzantium discusses the proper protection of sallyports against artillery fire in the passage quoted above,

p. 168 n. 33, and immediately before advocating multiple sallyports he describes the siting of defensive batteries. We are grateful to E. W. Marsden for discussing with us by correspondence the connexion between sorties and the development of artillery.

⁸² Collingwood, *Antiquity* vi (1932) 272–3.

⁸³ A. W. Lawrence, *JHS* lxvi (1946) 99–107. Thanks are due to Professor Lawrence for access to his notes on Greek fortified sites.

and the enemy helpless without.⁸⁴ But their inclusion in such walls answered, probably, an all-round improvement in siege tactics, rather than purely the invention of catapults. There had been some advances in technique earlier and the introduction of artillery coincided with, as well as fostered, other developments.⁸⁵ Even before artillery was used, during a desperate siege sorties could be expected, though special provision for them in the way of sallyports may not have been made.⁸⁶ At Mantinea, however, multiple sallyports were an integral part of a new circuit which was built at a time when siege-artillery was probably not known in the Peloponnese, or, if known, its implications not so well understood that military engineers would have introduced architectural modifications specifically to counter its use by the enemy.⁸⁷

In the case of the Dema it is unlikely that the sallyports had a definite defensive role to play against artillery. In the first place, if the Dema held up a hostile advance, the enemy would try to outflank the obstruction, not to besiege it; secondly, its hilly site would confine enemy batteries effectively to certain positions, yet sallyports are everywhere; finally, the rampart was too narrow and too low to have been intended as an effective defence against an attack supported by ballistas or catapults. To deny that the wall was built against artillery is not to exclude it from the architectural tradition of the period when artillery began to be used.⁸⁸ Nevertheless, the sallyports themselves were surely incorporated in the design so as to afford the defence opportunities of striking against the personnel of a field army rather than of destroying the *matériel* of a siege.

The size, disposition, and composition of the troops who were to man the rampart can only be conjectured. The garrison would certainly not be a mere handful of men thinly strung out along the top of the wall (for effective defence with inferior numbers is possible only with very high walls), but a fighting force sufficient to resist simultaneous attacks in strength at several points, and to send out strong detachments to counter-attack the enemy, while retaining enough to guard the fortification.

As for the disposition of this force, it would be necessary to prevent both infiltration over the comparatively low rampart and through the open sallyports, and a massed assault in one place. To line the rampart with men would be to disperse all one's strength along a broad front, to be then vulnerable to enemy concentrations, and to be unable to seize the initiative and mount a swift and strong counter-attack—unless there were in effect both a static guard and a mobile column. More probably the men would be concentrated in larger or smaller formations, held

⁸⁴ After the expulsion of the Persians, Themistocles planned to fortify the Piraeus with walls so thick and so high as to repulse all attacks. They could then be lightly garrisoned by a few inferior troops, while the rest of the manpower served at sea (Thuc. i. 93. 6).

⁸⁵ During the Peloponnesian War, before artillery was known in Greece, some sieges were marked by a ruthless exploitation of all the then known resources of war and the improvisation of new devices; cf. the siege of Plataea, 429 B.C. (Thuc. ii. 75–78), and the flame-thrower used at Delium, 424 B.C. (Thuc. iv. 100). Dionysius of Syracuse, the first to use catapults, when besieging Motya in 398 B.C., made use also of other innovations, notably movable towers (Diod. xiv. 50–51). Alexander the Great, when attacking Tyre in 332 B.C., employed the first recorded stone-throwing ballistas and other improved siege-machinery (Arrian, *Anab.* ii. 16 et seq., especially 21. 7).

⁸⁶ At the siege of Plataea (see previous note) the first precaution taken by the besieging forces was to erect a stockade to prevent sorties.

⁸⁷ Fougères, *Mantinée* 139. The first use of artillery was in

Sicily at Motya in 398 B.C. It became known in Greece, at Athens, by 371/370 B.C. (*IG* ii.² 1422. 9; cf. *IG* ii.² 120. 37). Mantinea was refounded by Epaminondas in 371 B.C., when the circuit now preserved was constructed (Fougères, op. cit. 132). A. W. Lawrence, op. cit. 102, postulates that a besieged garrison would soon learn to counter enemy artillery with artillery of its own, mounted on the city walls, but that there would be a time-lag between the first use of the new weapon and the changes brought about by it in the actual design of fortifications.

⁸⁸ E. W. Marsden sees in the meandering course and the re-entrants at the saddles a similarity to the enfilading devices of artillery-period warfare. He tentatively suggests that catapults were placed on or near the wall in a defensive role, and that the individual sloping ramps of the broad sections (so different from the normal means of access to ramparts, staircases built parallel to the walls) were for mounting these on top of the rampart. Ramps were rare in Greek fortifications; for a ramp at Miletus, see A. von Gerkan, op. cit. 63 and fig. 35.

ready for any action required—sometimes sent to man the ramparts, sometimes grouped in the ‘assembly areas’ to be led out simultaneously from a number of exits.

Of the composition of the force it can only be said for certain that it would consist either entirely or overwhelmingly of infantry. But the Dema itself invites conjecture as regards its general character. The elaborate defensive scheme implies a tight control of men and a confident ability to move from defence to attack and to revert again under pressure. Sorties are altogether risky: if successful, they would be very successful, for they might well inflict heavy casualties on the enemy without the sallying party’s incurring serious loss or being seriously impeded in its return; but if mismanaged or allowed to pursue too far, they might possibly be disastrous, the detachment being checked, counter-attacked, cut off, and annihilated. To base the whole defence so largely on sorties suggests a professional skill on the part of the commander, and training and discipline on the part of the men. The latter would have to sally out in single file, advance in formation or in open order across very rough ground, engage the enemy, break off contact at a word of command, and, possibly under heavy pressure, retire in orderly style one at a time through the rampart. The operation suggests the battle drill either of a very well-trained levy, or perhaps rather of a professional soldiery.

As for the choice between heavy infantry in close formation or light-armed men in more fluid combinations, the presumption must be that the large number of posterns and their narrowness, indicative of many local counter-attacks to be carried out by small detachments, favoured the adoption of light-infantry skirmishing tactics. Small isolated bodies of slow-moving heavily armed infantry, advancing to engage in close combat, would be extremely vulnerable, caught in the open. They would be more effective if files from several posterns could link up to form a longer common front, and for this perhaps a smaller number of larger exits would have been more convenient. But in itself the erection of a protective barrier is proof of a disinclination to commit Athenian forces to a pitched battle in the open. The Dema would call for a speed in attack and in withdrawal to be expected only of men unencumbered with heavy armour and equipped with missile weapons. The balance of probability, then, is in favour of the use of the peltast as opposed to the hoplite.⁸⁹

Finally, to illustrate how the Dema may possibly have been intended to function, we offer the account given by Xenophon of how frontier stockades were erected and manned to oppose the entry of Agesilaus into the Theban plain (see p. 176 above).⁹⁰ When Agesilaus marched north with over 20,000 men, Chabrias, an Athenian strategos and a professional soldier, led his mercenary force of peltasts from the borders of Attica to Thebes in order to direct the defence. An elaborate system of trenches and stockades was built, barring the approaches from the south and surrounding the Theban plain and the most valuable portions of the territory; its line probably followed higher ground where possible.⁹¹ The field-works must have been of considerable total length and could not have been leisurely constructed. Agesilaus tried for days to penetrate them, but in vain; the defenders marched parallel to him inside the stockade and concentrated their strength wherever he appeared. On one occasion Agesilaus was in the process of withdrawing and his troops preparing to stand down, when his opponent seized this opportunity to launch a sortie against the disordered men. Openings had been left in the stockade, apparently numerous and regular, and certainly in some places large enough to admit the

⁸⁹ The peltast was originally, and especially as developed by the Athenian military innovator Iphicrates, a soldier armed with missile weapons and trained to skirmish. Later he was given a spear far longer than the hoplite’s, perhaps to compensate for the disadvantage in close combat of insufficient armour, and used in the phalanx. The longer

spear, which would be unsuitable for skirmishing, was sometimes anachronistically attributed to Iphicrates (Diod. xv. 44. 3).

⁹⁰ *Hell.* v. 4. 9–10, 38–42, 49.

⁹¹ Some indication of this is seen in Diod. xv. 32. 2–3.

passage of horsemen.⁹² Theban cavalry, till then concealed behind the stockade, emerged suddenly and charged into the Peloponnesians, with considerable effect. Agesilaus counter-attacked; the Thebans lost their nerve, misjudged their answering volley, and were driven back behind their lines, losing a few men. Eventually Agesilaus was able to penetrate the defence only by a dawn attack at an undefended point. The Thebans, finding their position no longer tenable, retired within their city walls, not risking an open battle, and left the plain to be ravaged.

IV. DATE

A study of the Dema Wall would be incomplete without some discussion of its date and special purpose. Previous study of these problems has been made difficult by a lack of detailed knowledge about the wall itself, and the main evidence produced in favour of any given solution has been of necessity largely historical probability rather than archaeological fact. It has been our primary aim, therefore, to prepare an accurate description of the whole wall and to collect all the archaeological evidence available to us so that interpretations of the Dema Wall can be based in future on firmer grounds than has been possible before. It is more than probable, however, that other evidence exists, evidence which might prove more telling than any we have obtained. Consequently, any interpretation that we suggest will have its limitations and cannot claim to be final. We can only hope that it will do justice to archaeology and offer no violence to history.

The archaeological evidence is best considered under two headings.

I. Evidence from the wall: (a) Style; (b) Military Architecture; (c) Pottery.

II. Evidence from outside the wall.

I. *Evidence from the wall*

(a) *Style*. The study by R. L. Scranton (op. cit.) of the various styles of masonry used by the Greeks has made it possible to date walls with some precision as long as they have a clearly defined style. The Dema Wall, however, exhibits various styles of masonry and it is impossible to pick out a single well-defined one and make it characteristic of the whole wall unless one adopts a cumbersome and non-committal phrase such as 'basically dry rubble but exhibiting several other styles to a greater and lesser degree'. If then the wall is to be dated by its masonry alone, it should presumably be placed as late as the most advanced technique present; thus, the use of coursing and quadrilateral forms would date the wall to the fifth century B.C. or later.⁹³ A general confirmation of this date is provided by the great similarity between the Dema Wall and the Princess Tower in south Attica,⁹⁴ as well as with certain sections of the inner and outer circuits of the fortress at Rhamnous.⁹⁵

There are two other stylistic indications which suggest that the wall was built in the classical rather than an earlier period. The first is the appearance of a drafted corner at the angle of a sallyport. It has been pointed out in the description of this section that this drafting, although the only example we could find, is not in fact an accidental break in the stones but deliberate on the

⁹² Xenophon, op. cit. v. 4. 39: οἱ τῶν Θηβαίων ἵππεις τέως ἀφανεῖς ὄντες ἐξαίφνης διὰ τῶν ὠδοποιημένων τοῦ χαρακώματος ἐξόδων ἐξελαύνουσι.

⁹³ According to Scranton's chronology, the prevalence of coursing and quadrilateral forms, noticeable even in so roughly constructed a wall as the Dema (see p. 170 above), would seem first to exclude a date in archaic times suggested by a certain similarity between much of the rubble work and

Lesbian techniques; secondly, to point to a chronological advance on the normal polygonal style of the fifth century B.C., and finally to recall the trapezoidal and ashlar techniques of the later fifth and fourth centuries B.C. Cf. Scranton, op. cit., chronological notes, and summary.

⁹⁴ John H. Young, *Hesperia* xxv (1956) 122-4 and pl. 34 b.

⁹⁵ J. Pouilloux, *La Forteresse de Rhamnoute* (1954) 23-48 and pls. xv. 2-3, xxi. 2-3, and xxiv. 1-2.

part of the mason. There is a good parallel for this and for its single appearance in a wall of some length in tower N at Rhamnous,⁹⁶ which is dated to the late fourth or early third century B.C.⁹⁷

The second indication is the frequent use of small stones as 'stacks'. Although Scranton considers that this technique has little chronological significance,⁹⁸ it is, nevertheless, worthwhile to observe that in Attica 'stacks' do not appear until the very end of the sixth or the beginning of the fifth century B.C., are common throughout the fifth century B.C.,⁹⁹ and still appear occasionally in the fourth century B.C.¹⁰⁰

(b) *Military architecture.* Military architecture, like religious or secular architecture, was a constantly changing art. New systems of defence were designed to oppose new tactics of attack. Consequently, it should be possible to date walls by their style of architecture. Such a method at present, however, only reveals the approximate period in which a fortification is built. Nevertheless, even this general information would be welcomed by those studying a wall such as the Dema, about which so little is known.

The feature of the Dema most significant in terms of military architecture is the presence of so many sallyports, the purpose of which has been fully discussed above (see p. 168). Of the parallels for a multiplicity of posterns, the inland wall at Iasus in Asia Minor appears to be the most significant because it so closely resembles the Dema in its great length, its meandering course and tactical siting on barren hills, and its systematic incorporation of posterns in an indented trace. But the date of its construction is disputed. Nevertheless, it seems likely that it was built in the fourth century B.C., and perhaps early in the century.¹⁰¹ The fortifications at Gortys and Mantinea also provide parallels. The north-west sector at the former has been very plausibly dated to the period 370–365 B.C. by R. Martin;¹⁰² the multiple sallyports at the latter, which are incorporated in some of the projecting towers of the circuit rather than in any indentations of the curtain, can be attributed to the refortification of the city in 371 B.C.

The cross wall at Miletus might also be considered in relation to the Dema, since it contains many posterns. The two walls, however, are structurally quite different and that difference is not entirely accounted for by the lack of similarity in function. The fortification at Miletus is of a much more developed type than the Dema and its system reflects the defensive improvements of an advanced period of artillery warfare. The greater elaboration and the late date of the Miletus wall, c. 200 B.C., suggest that it should be cited not as a chronological parallel, but rather as a *terminus ante quem*.

The parallels noted above imply that a wall with multiple sallyports would not have been built before the beginning of the fourth century B.C., since the military principles involved seem to have been initiated for the first time in the early years of that century.¹⁰³ Further precision is not possible because the number of available parallels is not sufficiently large nor in the case of Iasus is the date securely established. In addition, however, it is valid to consider, in connexion with fortifications which have sallyports within indentations, those fortifications characterized

⁹⁶ Op. cit. 31, 44, 50, and pl. xiii 1.

⁹⁷ Ibid. 43–66. Cf. also C. W. J. Eliot, review of J. Pouilloux, op. cit., in *AJA* lx (1956) 200.

⁹⁸ Op. cit. 80.

⁹⁹ K. Kourouniotes, *ADelt* xi (1928–8) 49–51; W. Wrede, *Attische Mauern* 59; and Rodney S. Young, *Hesperia* xx (1951) 256–61.

¹⁰⁰ John H. Young, op. cit. 126 ('The Golden Pig Tower') and pl. 35c.

¹⁰¹ Krischen, quoted in *AA* 1913, 476; G. Guidi, *Ann.* iv–v (1921–2) 346–50. Iasus was a fortified city in the fifth cen-

tury B.C.; it was destroyed and abandoned in 405 B.C., and was not refounded and rebuilt until 394 B.C. (Thuc. viii. 28. 2–4, 29. 1; Diod. xiii. 104). The walls of the island city probably date to this reconstruction and so possibly does the inland wall. But its style differs from that of the walls on the island, and may indicate its later construction as an additional defence. The coursed masonry is consistent with a fourth-century date. Martin, *BCH* lxxi–lxxii (1947–8) 92 n. 3, includes the inland wall in fortifications of the fourth or third century B.C.

¹⁰² Op. cit. 120–47.

¹⁰³ Martin, op. cit. 92 and n. 4.

by indentations but without posterns. Since the postern towers at Mantinea are only a variant of the normal wall tower, so a similar relation between the indented traces with posterns and those without may be postulated, and the dating evidence for the latter may have some bearing on the date of the Dema. From the latest evaluation of the indented trace it would appear that it is a particular characteristic of fourth and third century B.C. fortifications.¹⁰⁴ Of the two linear walls specifically noted above (p. 177), both constructed with indented traces, that near Stylida is either late-fifth or fourth century B.C. in date, while the Thermopylae wall, often attributed to the Phocians, has features suggesting that the main fabric of the wall is much later than the Persian wars.¹⁰⁵

Our conclusion from this study of military architecture is that a date in the fourth or possibly the third century B.C. is the most likely for the Dema.¹⁰⁶

(c) *Pottery*. In the course of many visits to the Dema Wall made over a period of several years by members of both the British School of Archaeology and the American School of Classical Studies about fifty sherds have been collected from the immediate neighbourhood of the wall. These sherds were found on either side of the wall and on the top of the rubble fill which forms the wall's platform. Since no excavation was undertaken, no sherds came from within the fabric of the wall nor from a position which bore an intelligible relationship to the wall. Consequently, no one sherd has a significance more important than any other.

Most of the sherds are coarse, gritty, micaceous, and unglazed, and come from the bodies of household pots. It is impossible to give them an exact date, but none of them appear to be Roman. The remainder of the sherds, about a dozen pieces, can be assigned to certain periods with some precision. We noted a handle and a base fragment from the archaic period, a rim fragment from a lekane c. 500 B.C., several sherds with black glaze from the fifth and fourth centuries B.C., a black glazed fragment with rouletting from the middle of the fourth century B.C., and several joining fragments of a bowl with incurving lip. This last piece is very similar to some found in the Athenian Agora and should be placed in the second half of the fourth century B.C.¹⁰⁷

It is very difficult to know how to interpret this ceramic evidence; at the same time it is all too easy to give it an undeserved importance. Since we cannot determine under what circumstances the pottery came to be left at the wall,¹⁰⁸ and since we have no control whatsoever over whether our collection represents a fair sampling, we think it best not to adopt any firm conclusions on the basis of such evidence.

¹⁰⁴ F. Noack, *AM* xix (1894) 428, discerns Mycenaean origins; Scranton, op. cit. App. ii, considers it an early feature; Martin, op. cit. 135-9, classifies the relevant sites and draws subtler distinctions; the Dema belongs to his second group of later indented walls, dated from the mid-fourth century B.C. onwards, and including also Priene, Samothrace, Samiko, and the wall near Stylida.

¹⁰⁵ The siting of the wall along the south edge of the ridge and the provision of staircases along its north side suggest that it was built by forces occupying the north end of the pass against the advance of an enemy coming from the south—a situation not in keeping with the needs of either the Phocians or the Spartans. The staircases must surely therefore be later than 480 B.C., and possibly the main fabric of the wall, an admittedly much renovated one, represents a new layout of the fortification some time after that date. See Béquignon, op. cit. 47, for possible later occasions. The occupation of the pass by Philip in 346 B.C. would provide a plausible occasion for the building of a

rampart facing south; Cf. *AJA* 1958, 211-13.

¹⁰⁶ The similarity in function and perhaps in general plan between the Dema and the defensive stockade erected in 378 B.C. by Athenian troops in Thebes is possibly to be regarded as confirming a fourth-century date. Likewise, if any weight may be attached to the conjecture that the Dema was planned by and for a professional soldiery, consisting of light-armed men, this general date finds support in the rise of professionalism in that century and a consequent increase in tactical skill, and also in the creation and independent use of the peltast arm, notably by Athenian and mercenary commanders, from the beginning till towards the end of the fourth century B.C.

¹⁰⁷ Cf. P 1830 (*Hesperia* iii (1934) 318, fig. 4: A 20).

¹⁰⁸ i.e. was it left by farmers living in the vicinity, by those who pastured their flocks in the valley, by those who built the wall, by those who manned the wall (if indeed it was ever guarded), or was it left by a combination of these and possibly other groups?

II. *Evidence from outside the wall*

There are three groups of remains lying some distance from the wall, one to the west and two to the east. We examined them in the hope that they might assist in establishing the wall's chronology. The first group is some 13 metres west of the Dema Wall and represents, as far as we can determine, the ruins of a private house (see pp. 171 f. above).

About thirty sherds, some joining, were collected from within the house. Approximately half were semi-glazed, the rest fully glazed and of good fabric.¹⁰⁹ Noted among the latter group were several fragments covered with strong black glaze, pieces from the rim and wall of a red-figured krater and from the lip of a small pyxis, and part of the base of a black-glazed lamp. The krater and pyxis are from the end of the fifth or the beginning of the fourth century B.C. The lamp fragment is from a type 24 A which was common from late in the third quarter to the end of the fourth quarter of the fifth century B.C.¹¹⁰

Although the quantity of potsherds so far found in the house is not great, it is noteworthy that all the fragments appear to be of the same date. It seems to us, therefore, that, despite their small number, they afford a valid indication of the period during which the house existed. On the basis of the ceramic evidence, then, we would consider a time before the second Peloponnesian War to be most unlikely. Historical considerations would make the period of the Archidamian War also very unlikely,¹¹¹ especially if we remember the route taken by the Spartan king in the first invasion of Attica¹¹² and the defensive policy advocated by Pericles.¹¹³ We are left, therefore, with the years between 421 B.C. and the end of the fifth century B.C. (or possibly a little later).

To many Athenians the Peace of Nicias undoubtedly meant the end of the war and a return to pre-war conditions, a state which would have been especially welcomed by those who lived and farmed in the country districts of Attica.¹¹⁴ We believe that the house near the Dema Wall is best understood against such a background and we would date the building of the house c. 420 B.C.

If the date put forward is correct, it should, if possible, explain why the house was occupied for only a short time and then seemingly abandoned or destroyed, as is suggested by the pottery. We think that our proposed date does explain these phenomena and that the house suffered in the severe ravaging of the countryside that occurred after the capture of Decelea by the Spartans in 413 B.C. and its subsequent garrisoning by the Spartans and their allies.¹¹⁵

We have therefore ceramic evidence that points to an inhabitation date in the last quarter of the fifth century B.C., and historical considerations which make the period c. 420-410 B.C. the most likely.

The importance of establishing this date so precisely is immediately evident when one considers the position which the house had in relation to the wall. The house stood on the Eleusis side directly in front of the most strategically important part of the wall, that section

¹⁰⁹ There were also two unglazed sherds, one being from the rim of a lekanis.

¹¹⁰ Both type and date are based on the study of Greek lamps by R. H. Howland to be published in 1958 as a monograph subtitled *Greek Lamps and their Survivals* in the series *The Athenian Agora, Results of Excavations conducted by the American School of Classical Studies at Athens*.

¹¹¹ Although the last invasion of Attica during the Archidamian War took place in 424 B.C., the threat of further invasions would have persisted until the Peace of Nicias.

¹¹² Thuc. ii. 19. 2.

¹¹³ Thuc. ii. 13. 2 and 14.

¹¹⁴ Thucydides (v. 25) describes the period of peace as a

time of unrest and suspicion. This could be a retrospective view on the part of the author. At all events, the average person was probably quite unaware of the unstable political condition.

¹¹⁵ The Thebans who joined the Spartans were particularly thorough in their plundering and *Hellenica Oxyrhynchia* xii. 4 tells us that they removed even wood and roof tiles (see W. G. Hardy, *CP* xxi (1926) 346-55 for a full commentary on this passage). It is tempting to consider that we have a concrete example of this ruthless type of raiding in that we have found only a few scraps of roof tile in the area of the house.

through which the train passes today. It is inconceivable that both house and wall were in effective commission at the same time, for a standing structure in such close proximity to the wall would render it vulnerable at a point where strength was particularly demanded.¹¹⁶ Since we can firmly postulate that the wall must have preceded the house or followed it, we can declare with equal firmness that the wall came after the abandonment of the house. Had the wall been in existence when the house was built, the house could never have been placed in front of the wall on account of the tactical reasons noted above. It would certainly have been located behind the wall so as to enjoy the benefit of any security offered by it.¹¹⁷ Furthermore, the contrast in preservation between the solid remains of the wall and the almost eradicated remains of the house suggests that the house was the earlier structure.¹¹⁸

To sum up: the position and date of the house give us the definite information that the Dema Wall was built some time after the very end of the fifth century B.C.

The two groups of remains to the east of the Dema Wall both represent towers, the wall tower (see pp. 173 f.) and the Aigaleos tower (see pp. 174 f.). The wall tower has a style of construction quite similar to the Dema Wall and its strategic position makes it clear that both tower and wall were part of a single plan. It should, therefore, be considered contemporary with the wall.

From within the wall tower and the area of the rough enclosure surrounding it many fragments of roof tiles have been recovered. They are of the Laconian type and the fragments are about equally divided between cover and pan tiles. The fabric is heavy but not coarse. All are glazed on one side, unglazed on the other. The glaze is for the most part either red or black, sometimes brown, and usually streaky. On some pieces, however, the glaze is firm and the colour strong.

Identical tiles have been found in many other 'dry rubble' fortifications in Attica. At Leipsydriion, for example, they were found along with a few pieces of pottery from the second half of the fourth century B.C.¹¹⁹ Although the general type was common in the classical and early Hellenistic periods, tiles like ours are more typical of the fourth century B.C. than of any other century.¹²⁰

¹¹⁶ This point was fully appreciated in antiquity and provision was made accordingly. Philo of Byzantium recommended that a space of 60 cubits be left in front of city walls. At Nisyros an inscription of the fourth century B.C. set into the outer face of the wall of the city declared the 5 feet of ground adjacent to the circuit to be public property (see p. 118 above); this strip of open ground would be too little for tactical security, but it would prevent damage or encumbrance to the wall from private buildings and facilitate a general clearance of the area if needed.

¹¹⁷ Had the wall been obsolete at the time when the house was built, then a house might have been built in front of it. For economy, however, the house would probably have been placed so as to utilize the Dema as its rear wall as is the case with more recent structures along the Dema Wall. Also, a wall stylistically dated as not earlier than the fifth century B.C. would not be militarily obsolete by the end of that century; strategically it could have become obsolete due to Pericles' policy, but its potential value would still remain and so the above-mentioned factors of military tactics and private security would still operate.

¹¹⁸ It might be expected that the complete destruction visited upon the house would have affected to the same degree an existing (even if 'obsolete') rampart; if the wall did not exist at the time, the contrast is less surprising. Granted that the house could well have been razed down to its very last course by enemy action, natural decay, or

modern cultivation, the sparse remains now preserved suggest nevertheless that the builders of the Dema may have levelled the already derelict site to remove all obstacles from in front of their wall. But such levelling (if any took place) could not account for a primary destruction of the house and the termination of its occupation, for this event occurred at a date when the construction of the Dema would have been strategically pointless (with the enemies of Athens holding Decelea) and historically improbable (since so bold an enterprise and a departure from the accepted (Periclean) strategy would hardly have been left unrecorded). It would follow that there was a lapse of time between the abandonment of the house and the erection of the rampart.

¹¹⁹ This fort, noted by A. Milchhoefer (E. Curtius and J. A. Kiepert, *Karten von Attika*, Text vii. 7) and L. Chandler *JHS* xlv (1926) 15), was examined and surveyed by E. Vanderpool and C. W. J. Eliot in 1953. The latter is preparing a study of the fort.

¹²⁰ Mrs. Carl Roebuck in the spring of 1954 kindly looked at some similar tiles from Attica and said she believed them to be of fourth century B.C. date. One could also mention parallels in the Athenian Agora from fourth century B.C. contexts, particularly A 432 (*Hesperia*, Suppl. iv (1940) 78-79 and 81, fig. 61), which has been placed in the third quarter of the fourth century B.C.

Despite these cited examples from the latter half of the fourth century B.C., we cannot insist on such close dating for our tiles because of the lack of other datable objects found with them. We can only claim that there exists a strong presumption that the tiles from the round tower should be placed somewhere in the fourth century B.C.

Besides the Laconian tiles, we found a fragment of an eaves tile, a base fragment from a coarse kalathos, and a few nondescript sherds.¹²¹

The second tower, that on Aigaleos, has been shown above (p. 174) to be closely linked with the wall tower, both by its construction and by its siting. The tiles found within and around it tell the same story. They are identical with those used in the wall tower and must date from the same period.

In addition to the tiles, a few pieces of pottery were found, including fragments from kalathoi and part of the foot of a black glazed kantharos (turned red in firing). The kalathoi, like the one in the wall tower, are insufficiently preserved to be dated: the kantharos, on the other hand, comes from the end of the fourth century B.C.¹²²

Although the pottery cannot be used to determine the absolute date when these towers were constructed, it can suggest the period of occupation¹²³ and thereby provide a *terminus ante quem*, which, in the case of the Aigaleos tower, must be c. 310 B.C. This in turn agrees with the evidence of the roof tiles, which were presumably made at the time of the building of the towers and which we had already decided were most likely from the fourth century B.C.

The archaeological evidence for the dating of the Dema Wall can be summarized very briefly. Firstly, there is the positive evidence from the house in front of the wall, which makes a date before the end of the fifth century B.C. impossible. Secondly, if we are right in assuming that the towers and the wall are contemporaneous, then a date after the end of the fourth century B.C. is equally impossible. Finally, we should note that a date within the fourth century B.C., which is demanded by our first two points, is entirely in accord with the chronological implications suggested by our study of the wall's style and of its military architecture.

The archaeological evidence has determined the century within which the Dema Wall was built. To complete our survey, we must now attempt to narrow these chronological limits by a consideration of the historical evidence. But since no classical author records the occasion in the fourth century B.C. when the wall was constructed, our arguments and proposals will have to be based on historical probability. Any suggestions we may make will suffer, therefore, from the limitations and doubts which always surround circumstantial evidence.

During the first half of the fourth century B.C. the Athenians were largely concerned with regaining their former power and prosperity, and in these endeavours they were remarkably successful. The second half of the century, on the other hand, was spent in a struggle for independence against Macedon which ended finally with Athenian submission. During those hundred years the Athenians faced many crises, any one of which might have prompted them to construct the Dema Wall. It would be pointless, however, for us to consider all those occasions,

¹²¹ None of these fragments can be dated; the eaves tile, however, is not later than the fourth century B.C. Kalathoi with corrugations on the inside surface are normally thought of as Hellenistic, but they first appear in the latter half of the fifth century B.C. (cf. Athenian Agora P 11017, P. E. Corbett, *Hesperia* xviii (1949) 335 and pl. 97, no. 95) and there are examples from the fourth century B.C. (cf. Athenian Agora P 4062, Homer A. Thompson, *Hesperia* iii

(1934) 326, A 63).

¹²² According to G. Roger Edwards, to whom we are grateful, c. 310 B.C.

¹²³ Even if the wall and towers were built for a specific occasion, there is no reason to think that once that occasion had passed all elements of the system were entirely abandoned; the towers at least would have always remained valuable observation posts.

because in every case but one we know so little about the precautions taken by the Athenians for their own safety. The one exception concerns the state of emergency which prevailed immediately after the battle of Chaeronea in 338 B.C., and it is the precautions taken at that time which we will study.

When the Athenians learned of the disastrous outcome of the battle of Chaeronea, they straightway took steps to defend their city against the Macedonians. Lycurgus in his speech *In Leocratem* gives us a vivid account of the measures undertaken at that moment. An assembly was held which decreed that the women and children be brought within the walls and that the generals have the right to appoint to defence stations any Athenian or anyone resident at Athens (16). Hyperides even proposed (εἶναι) τοὺς μὲν δούλους ἐλευθέρους, τοὺς δὲ ξένους Ἀθηναίους, τοὺς δ' ἄτίμους ἐπιτίμους (41). It was this last act, later indicted as illegal, that symbolized for Lycurgus the utter misfortune in which Athens found herself. But the Athenians did not rely just on decrees (44): 'Yet men of every age offered their services for the city's defence on that occasion when the land was giving up its trees, the dead their gravestones, and the temples arms. Some set themselves to building walls, others to making ditches and palisades. Not a man in the city was idle.'¹²⁴

The expected attack, however, did not take place. Philip followed a policy of leniency toward the Athenians and left their country unmolested. This removed the immediate threat, but did not lessen appreciably the danger, of future war. In order that Athens might be prepared for this eventuality, a programme of rearmament was initiated at once and carried on for several years under the brilliant administration of Lycurgus. Among the many things which Lycurgus accomplished, we should note the remodelling of the ephebate and the consequent garrisoning of border forts, the rebuilding of the navy, and the completion of Philo's arsenal and some unfinished docks at Piraeus. Of greater interest to us in this study is the work done on the walls during this period.

In the spring of 337 B.C.,¹²⁵ Demosthenes proposed in the assembly that each of the ten tribes choose a superintendent and treasurer τῶν ἔργων ἐπὶ τὰ τείχη.¹²⁶ The motion was accepted, and a few days later the individual tribes held their meetings and appointed the required officials, one of whom was Demosthenes from the tribe Pandionis. Each commissioner was then assigned his share of the work to be done on the walls and was given (or credited with) a sum of money from the treasury.¹²⁷ Demosthenes was put in charge of the circuit of Piraeus¹²⁸ and received 10 talents¹²⁹ (or slightly less¹³⁰) to which he contributed from his own estate a further 100 minas.¹³¹

Our sources do not inform us about the work of Demosthenes' nine other colleagues. We can assume without question that some of them were assigned sections of the fortifications of Athens and of the Long Walls. If, however, the amount of work and the available money were distributed equally among the ten officials, and if the circuit of Piraeus and 10 talents represent a tenth part, then it would seem very probable that a few members of the board were given tasks outside Athens, since the defences of the city would not have required the services of all of them. Even though there is no direct evidence to prove this, there exists testimony showing that the Athenians at one time were planning to do work on fortifications other than those around the

¹²⁴ Translated by J. O. Burt, *Minor Attic Orators* ii (Loeb ed., 1954).

¹²⁵ Aeschines, *In Ctes.* 27: ἐπὶ γὰρ Χαϊρώνδου ἄρχοντος, Θαραγιλιῶνος μηνὸς δευτέρᾳ φθίνοντος . . .

¹²⁶ Op. cit. 27.

¹²⁷ This procedure is inferred from remarks in Aeschines' *In Ctes.* and Demosthenes' *De Cor.* relating to the latter's

experience as a commissioner.

¹²⁸ Demosthenes, *De Cor.* 300 and Plutarch, *Mor.* 851 a.

¹²⁹ Aeschines, op. cit. 23.

¹³⁰ Ibid. 31.

¹³¹ Ibid. 17 and Plutarch, op. cit. 845 f. (Demosthenes op. cit. 118 and Plutarch op. cit. 851 a record his gift as three talents, but neither decree can be wholly trusted for details.)

city and Piraeus. Some ten years earlier, in 346 B.C., in a moment of panic the Athenians resolved καὶ τὰ φρούρι' ἐπισκευάζειν καὶ τὸν Πειραιᾶ τευχίζειν.¹³² The crisis which prompted this decree quickly passed and we have no reason to believe that the proposals were put into effect.¹³³ Nevertheless, the need for setting in order the border forts would have still remained. Lycurgus' comprehensive programme of defence is not likely to have overlooked these important but seemingly neglected forts on Attica's frontiers. One of these fortresses was Rhamnous and, although conclusive evidence is lacking, it is quite possible that its defences were in fact re-organized at this time.¹³⁴

We must now return to the problem of the Dema Wall. We have seen that the Athenians engaged in work on their fortifications directly after the battle of Chaeronea in 338 B.C. and then started again in 337 B.C. The first operation was hastily done—an emergency measure—and had a single aim, the defence of the city. The second, on the other hand, was methodically organized and may well have embraced the needs of the country as well as of the city. If the Dema Wall is to be ascribed to either of these occasions, it must be to the second.

This immediately brings forward two important questions. First, did the ten commissioners have the necessary competency to build a new wall or did they have to limit their activities to repairs and remodelling of existing walls? Second, why build a wall from Parnes to Aigaleos at this moment?

To the first question there can be no definite answer. The ten officials, according to Demosthenes and Aeschines,¹³⁵ were designated οἱ τευχοποιοί, which LSJ translate as 'officers charged with repairing the city walls'. This translation is entirely correct in certain contexts, but not in every context. By the fourth century B.C. most of the work on walls would have been repairing and renovating, but, as we have already pointed out, not inevitably limited to the walls of the city. Just as the limitation to the city walls is only true in special circumstances, so is the limitation to repairs, because the term under discussion undoubtedly has the primary meaning 'a wall-builder'. As time progressed and fewer walls had to be constructed, the term was more often applied to those who repaired walls. We cannot prove that οἱ τευχοποιοί were allowed to build new walls if the necessity arose, but if they could not, then we might well wonder which officials were competent to do so.¹³⁶

The second question is one which concerns that Athenian strategy of defence. The gap between Parnes and Aigaleos, which the Dema Wall was meant to control, leads directly into the rich farm lands around Acharnae and Decelea, an area which had proved a valuable prize to the enemy in the Peloponnesian War. As Archidamus had demonstrated, this gap could be approached by an army coming from the direction of Boeotia. It was not necessary to pass close to Eleusis. The words of Demosthenes (*De Cor.* 301) make it clear that there was good reason for the Athenians to have concern over this northern frontier: 'What course of action was proper for a patriotic citizen who was trying to serve his country with all possible prudence and energy and loyalty? Surely it was to protect Attica on the sea-board by Euboea, on the inland frontier by Boeotia, and on the side towards Peloponnesus by our neighbours in that direction.'¹³⁷ Demosthenes' policy of surrounding Attica with friendly allies was undoubtedly stronger than

¹³² Demosthenes, *De Fals. Leg.* 125.

¹³³ Had the Athenians done any work on the walls around Piraeus—presumably, their first consideration—it is hardly likely that Demosthenes only a decade later would have had to make such extensive repairs.

¹³⁴ J. Pouilloux, *op. cit.* 62–66.

¹³⁵ Cf. also Aristotle, *Pol.* 1321^b26.

¹³⁶ Demosthenes, *De Cor.* 118, described his own position

as ἐπιμελητὴς τῆς τῶν τευχῶν ἐπισκευῆς. This statement is bedded in an untrustworthy decree, and is itself suspicious since the official title for the appointment was quite different. We suggest that this title was designed *post eventum* and describes the nature of Demosthenes' work on the circuit of Piraeus, not the work of the board as whole.

¹³⁷ Translated by C. A. Vince and J. H. Vince (Demosthenes, *De Cor.* and *De Fals. Leg.* (Loeb ed.), 1926).

any encircling wall as long as the allies remained strong and loyal. Philip's triumph over the Thebans, however, changed the situation radically as far as the inland frontier was concerned. Other means of defence would have to be initiated if Athens was to meet a threat of danger from that quarter.

Perhaps the Dema Wall was Athens's answer to the loss of Boeotia. As we look at the wall today, knowing more about the Macedonians than the Athenians did in 337 B.C., we cannot help but feel that the wall would never have provided adequate protection against an army led by Philip or Alexander intent on capturing Athens. Perhaps the Athenians realized this too and so left the section of wall across the northern saddle apparently unfinished. Had the work of building been slow or had the wall been one of the last features of the rearmament plan to be implemented, then construction might still have been in progress in 335 B.C. when Alexander destroyed Thebes. This crushing defeat would have left few in doubt as to the weakness of such a fortification and the futility of completing it.

In the year 337 B.C. the Athenians commenced a vigorous plan of rearmament. Whether that plan included the Dema Wall, we will never know for certain on the basis of the material available today. From the archaeological evidence we have determined that the wall was built in the fourth century B.C. Our limited historical sources indicate that only in the period *c.* 337–336 B.C. did the Athenians have the machinery, money, and motive to build such a wall.¹³⁸ Perhaps, then, we should add the Dema Wall to the impressive list of public works such as the Pnyx and the Stadium, all of which were erected or remodelled when Athens was guided by Lycurgus.

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¹³⁸ Conon, for example, may well have had the machinery for such a task, but certainly lacked money. And would his friends the Thebans have understood his motive?

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(PLATES 36–44)

INTRODUCTION

IN 1956 the Greek Archaeological Council decided that there should be no excavations at Mycenae. The Anastelosis Department was still busy with the rebuilding of the Cyclopean walls of the Citadel along the western side and along the stretch of ashlar work in conglomerate from the Lion Gate to the north-western angle. At the actual north-western angle the Cyclopean work of the northern wall of the acropolis had originally met the conglomerate work in ashlar with a straight vertical joint. This has now been obscured in the rebuilding. The Archaeological Service was also planning and preparing to put into effect various measures to protect the site from damage by the large numbers of tourists who visit it every year.

Since we were thus not able to excavate, we devoted ourselves to studying and preparing for publication the finds from the excavations of previous years in the museums at Athens and Nauplia. In Athens the Director of the National Museum, Dr. Karouzos, and his wife, Mrs. Semne Karouzou, made us very welcome and afforded us every possible facility. Mrs. Sakellariou and Mr. Papathanasopoulos, assistant curators in the museum, also gave us much friendly help. At Nauplia Mr. N. Verdeles, the Inspector of Antiquities, and Miss Protonotariou, the Epimeletes, made special arrangements for our work and gave us every support. Our best thanks are due to all these friendly colleagues. We were able thanks to the kindness of M. Georges Daux, the Director of the French School, to enjoy again the skilled services of Arghyres Marines as technician. Mr. Sinclair Hood, the Director, and Mrs. Rabnett, the Secretary of the British School, helped us much in various administrative and financial matters. The financial support for our work was provided by a research grant from Bollingen Foundation and a contribution from the Craven Fund of Cambridge University. Our party consisted of myself and my wife, Mrs. W. J. Craig of Somerville College, Oxford, Miss Elizabeth Wace of Newnham College, Cambridge, Mr. R. Hope Simpson of St. John's College, Oxford, and Mr. David French of St. Catharine's College, Cambridge. The photography was successfully undertaken by Miss Elizabeth Wace, and in Athens Mr. Piet de Jong was able to execute several drawings for us.

In view of the scarcity of accommodation in the Nauplia hotels we all lodged at the Fair Helen Hotel at Mycenae, where we as usual received a warm and hospitable welcome from all members of the Dases family and drove over to Nauplia daily in a hired jeep. When required, Orestes Dases acted as foreman. During our work at Nauplia we enjoyed the companionship of Professor and Mrs. Åke Åkerström of the Swedish Institute, with whom we were thus able to discuss various Mycenaean questions while they were engaged in the study of the finds from their excavations at Berbate.

A. J. B. WACE

ADDENDUM: MYCENAE 1957

Since no excavation was permitted this year for the reasons stated above, we continued our work on the lines of the 1956 programme. Bollingen Foundation generously provided the necessary financial support. Our party consisted of my wife and myself, Miss Elizabeth Wace, Mr. David French of St. Catharine's College, Cambridge, and Mr. Charles Williams of

Princeton University as architect. We stayed at the Fair Helen Hotel at Mycenae from August 6th to September 2nd and journeyed regularly to Nauplia. There, Mr. N. Verdeles, the Ephor, and Miss Protonotariou, the Epimeletes, again gave us every facility for our work. The manuscript of the report written in 1956 on the deposit of pottery from the Prehistoric Cemetery was checked with the material.

A special study was made of the pottery found in 1939 at the Treasury of Atreus and of other pottery from Mycenae. Mr. Williams undertook a detailed study of the decoration of the Treasury of Atreus. He worked on the fragments in Athens, where Dr. Karouzos and his staff provided every assistance, and in Nauplia, where Dr. Papademetriou unselfishly allowed him to study the new fragments he had found. At Mycenae he made a close study of the actual façade. Mr. Williams also executed a series of drawings of some of the pottery under study.

A. J. B. WACE

MYCENAE 1939-1956, 1957

PART I. NEOLITHIC MYCENAE

(PLATE 36)

Stamatakes's excavations in the Grave Circle area revealed, although it was not recognized until much later, that Mycenae had been inhabited in the Early Bronze Age, the Early Helladic Period.¹ This was confirmed by subsequent researches which produced Early Helladic material from the foot of the Ramp, outside the Grave Circle, beneath the South House and below the Palace.² Now the recent work of Dr. Papademetriou and ourselves has yielded fresh evidence. He has found more E.H. material in Schliemann's Grave Circle and some possible Neolithic sherds as well.³ In the area of the Prehistoric Cemetery outside the Cyclopean walls to the north-west of the Lion Gate we have found in a mixed unstratified layer at the eastern foot of the mound or tumulus which covered the dome of the 'Tomb of Aegisthus'⁴ many fragments of E.H. pottery, both decorated and plain. Since the plain E.H. ware found is of a simple, thickish fabric hand-polished and usually of a dull red or of a mud colour, we had at times wondered whether some of these fragments might not almost be classed as Neolithic. This was especially so in the case of some of the fragments from the lowest strata at the foot of the Ramp. Unfortunately these fragments were lost during the war in the Nauplia Museum and cannot now be checked.

The discovery of Neolithic B pottery at the Argive Heraeum,⁵ and still more recently Dr. Caskey's most successful excavations at Lerna, encouraged us in the idea that a site like Mycenae was probably inhabited in Neolithic times also. Since the Early Helladic material is not stratified, except in areas like the foot of the Ramp or below the South House, it was hardly to be expected that Neolithic remains, if found, would be stratified. It is always possible, however, that some part of the site, not yet explored, may have escaped later disturbance or over-building. We have therefore now paid particular attention to the unstratified debris found above the Prehistoric Cemetery at the eastern foot of the Aegisthus mound. Among this we have found two sherds which are in our opinion almost certainly Neolithic.

No. 52-274 (PLATE 36 *a, b*)

Cups or jars, two fragments, parts of lips. Broken. Probably Neolithic.

(*a*) 0.025 m. long, 0.0275 m. high; (*b*) 0.06 m. long, 0.034 m. high.

Thin fabric, hand-made, of moderately fine clay, muddy grey-brown, well polished in and out.

It is not possible to determine the shape, but the fragments appear to be from the lips of tallish cups with straight vertical sides. The sides taper off to the upper

edge, which has a very slight roll on the outside.

The ware is of a rainbow character in colour, grey inside and grey tinged with orange-pink outside.

Both pieces are decorated with fine horizontal combing probably incised before the polishing. The grooves, both those raised and those sunk, are irregular in width. The 'combing' was probably done by a thin instrument like a splinter of wood, or by an obsidian blade drawn round and round the vase.

Although no vases decorated like this have yet been found at any Peloponnesian Neolithic site such as Corinth⁶ or Lerna, still the fabric of the pieces and the general resemblance to the so-called 'Rainbow Ware' incline us to accept these two sherds as definitely of the Neolithic Period.

¹ *BSA* xxv. 114 ff., figs. 26, 27.

² *BSA* xxv. 63 ff., 106 ff., 193, 197, 205, 209, 217.

³ Orlandos, *Ἐργον Ἀρχ. Ἑτ.*, 1955, 74.

⁴ *BSA* l. 207 f.

⁵ Blegen, *Prosymna* 22 ff.

⁶ Weinberg, *Hesperia* vi. 487 ff.

Another possible Neolithic piece from the same deposit is:

No. 52-380 (PLATE 36 c)

Jug, four fragments, three pieces of body, one of handle. Broken. Probably Neolithic.

Largest fragment: 0.135 m. high, 0.10 m. wide; handle 0.03 m. wide.

Thin fabric, hand-made, of fine clay, grey in colour, and smoothed outside.

In shape the vase was a jar, with a spherical body tapering to a tallish neck. It is not possible to determine the position or shape of the handle or the character of the vase.

The lip is not horizontal and may therefore have had a slight spout. The base of the handle can be seen on the body.

The ware is grey throughout, and is well made.

The decoration is incised. On the body there are two bands of a treble zigzag ornament bordered by a row of dots enclosed by single incised lines. The zigzags are separated by a single incised line. The incisions are shallow. The neck and handle are undecorated.

This vase has no immediate analogy in any known Neolithic ware from the Peloponnese. It does not resemble the grey late Neolithic ware from Corinth.⁷ So far nothing like it has been reported from Nemea, Lerna, Asea, or Hageorgitika. It suggests a very distant relationship to the grey sub-Neolithic ware of Knossos,⁸ but it does not appear to be a Cretan importation. On the other hand it has no resemblance to any known E.H. ware. Since it was found at Mycenae we may *a priori* consider it of local fabric and, since it does not seem to be E.H., class it, provisionally at least, as an example of a late Neolithic local Mycenaean ware. It does not resemble any known variety of Minyan ware.

With these two pieces in the same deposit there were three or four sherds of coarser, undecorated, hand-made ware with a smoothed and polished surface. They vary in colour and are almost mottled. Their surface colour shades from dull yellow-buff through orange-red to brown. The inner surface is smoothed and is 'bubbly' like so much of the painted Neolithic wares of the Peloponnese. Although these sherds have a generic resemblance to the undecorated first E.H. wares, they seem to belong rather to a Neolithic than to an E.H. stage. We are thus probably justified in classifying them as Neolithic.

None of these sherds is in itself of any value. As a group, however, they are important as indicating that there was in all probability some inhabitation of Mycenae in Neolithic times. It is to be hoped that further research may bring to light some undisturbed Neolithic strata at Mycenae and add a still earlier period to its long history.

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⁷ Weinberg, *op. cit.* 503 ff.

⁸ Not mentioned by Miss Furness in her study of Knos-

sian Neolithic ware, *BSA* xlviii. 94 ff.

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PART II. A FAIENCE CYLINDER

(PLATES 36-38)

I. THE CONTEXT

IN 1939 we cleared away the prickly oak scrub and excavated the rock ledge below the north temple terrace on the north summit of the acropolis of Mycenae.¹ Here we found on the edge of the steep rock remains of a wall of largish blocks of limestone. These we believe to have been part of a Middle Helladic fortification wall running round the upper part of the acropolis.² Behind this and held up by the wall were the ruins of two rooms and a thick deposit of M.H. pottery. Over this lay another stratum in which L.H. IIIB pottery was found. Here we found the splendid ivory group of two women and a boy which has already been published.³ Associated with it were a number of other objects, a male head in painted stucco,⁴ a sword pommel in white stone, some ornaments of gold and ivory, a number of beads of stone, paste, and faience including a lantern bead, and a cylinder of faience. The pottery, as stated, was of the L.H. IIIB style, but it was unfortunately lost in the Nauplia Museum during the war.

This collection of precious objects we suggested might have belonged to the Shrine of the Palace, which we believe can be recognized in a small room⁵ with a cement floor underlying the western foundations of the temples built here in classical times over part of the ruins of the Mycenaean Palace.

The faience cylinder is of special interest, since it is obviously an import and may therefore provide independent evidence for dating the collection, which may be listed roughly as follows:

39-168. Ornamental inlays in bone and ivory, but mostly in bone:

Lily flowers, bone, two, H. 0.045 m. (FIG. 1 *a*.)

Lily flowers, bone, three, H. about 0.034 m. (FIG. 1 *b*.)

Snail shell, bone, L. 0.024 m. (FIG. 1 *d*.)

Disk, pierced, bone, Di. 0.01 m.

Disk, pierced, broken, bone, black, Di. 0.01 m.

Strips, curvilinear, bone, two, L. about 0.05 m. (FIG. 1 *c*.)

Strips, rectangular in section, bone, nine fragments, longest L. 0.05 m.

39-169. Ivory, broken fragments, several, longest L. 0.065 m.

39-170. Faience, cylinder, pierced along longitudinal axis. Rather rubbed and glaze partly worn off. L. 0.027 m., Di. 0.01 m.

Soft white paste covered with yellowish blue-green glaze rather rubbed off. It shows in intaglio a long-legged bird, a man in a long cloak, a tree, another cloaked man, another tree, and another cloaked man in this order from left to right. (PLATES 37 *a*, *b*, 38 *a*.)

39-171. Dagger pommel, white stone, base pierced for attachment by a pin, Di. 0.075 m., H. 0.04 m.

39-172. Pounder, green stone, L. 0.055 m., W. 0.035 m.

39-173. Glass, several fragments of ornaments of glass now too much decayed to identify.

39-173 *a*. Button, steatite, H. 0.008 m.

39-174. Pendant, gold, pomegranate bud shape, L. 0.015 m. The globe and the petals seem to be in one piece. The suspension ring at the base and the centre among the petals

¹ In the excavation notebooks and on the labels this area was known as 'Prinaria' from the oak scrub. The excavation was conducted by Mr. F. H. Stubbings.

² *BSA* xlix. 248 ff.

³ Wace, *Mycenae* 83 ff., pls. 101-3. Professor Mylonas, *Ancient Mycenae*, thinks the ivory group 'was prepared to be deposited in a grave', a theory for which there is no evidence.

⁴ Wace, *op. cit.* pl. 104 *b*.

⁵ Numbered 16 in Dr. Holland's plan, Wace, *op. cit.* pl. 4. Professor Mylonas, *op. cit.* 62 ff., is unwilling to ac-

cept this as a shrine. He minimizes the fact that the Archaic and Hellenistic temples later built on the ruins had a north-south orientation, most unusual for Greek temples, but which is nevertheless the orientation of the 'Shrine'. He offers no explanation for the unusual orientation of the Archaic temple, but believes that the builders of the Hellenistic temple preferred to orient it from north to south on 'easily handled debris' rather than on hard rock. The Hellenistic foundations follow the lines of the Archaic temple and lie only a few centimetres above the cement floor of the 'Shrine'.

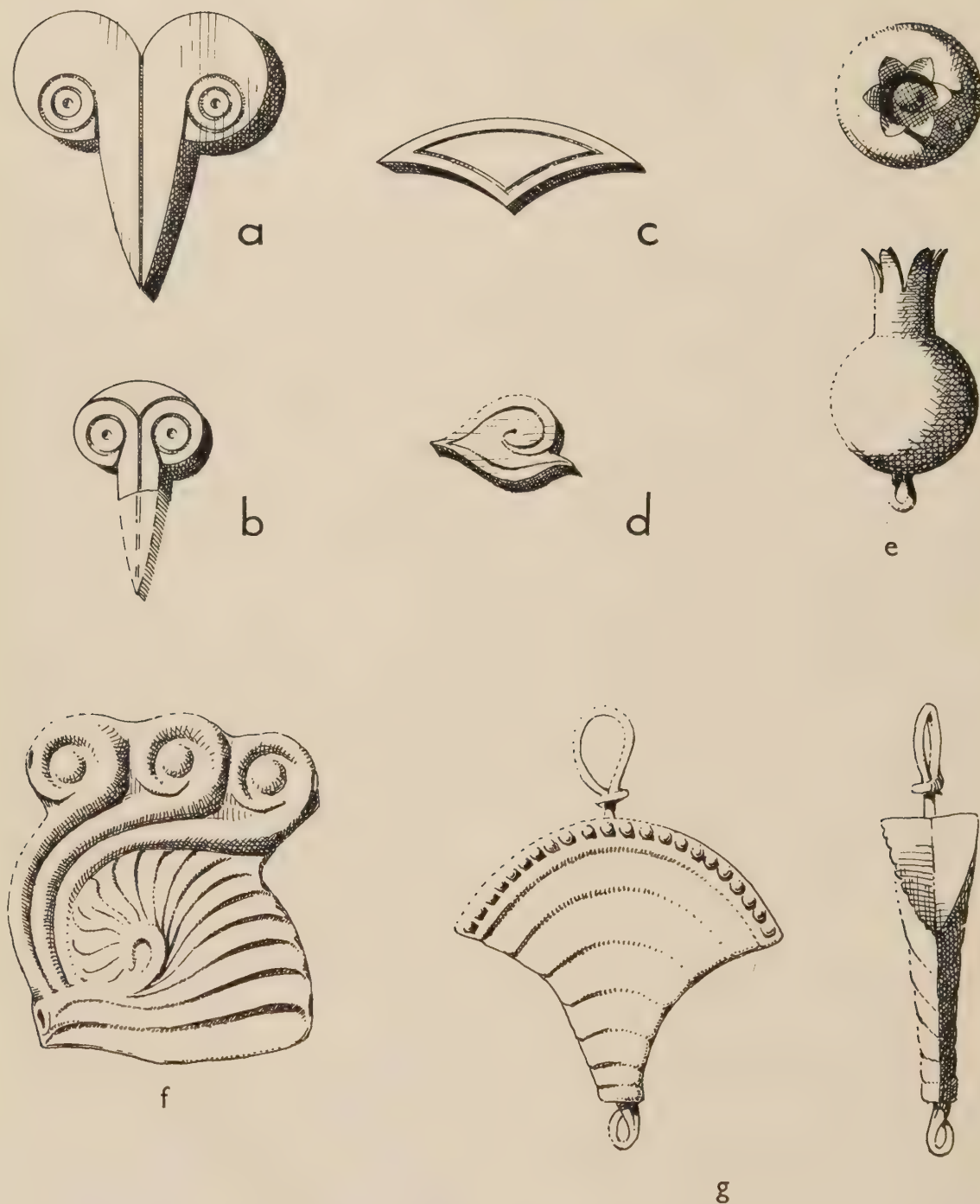


FIG. 1. *a, b*: LILY FLOWERS (1 : 1). *c*: CURVILINEAR BONE STRIP (1 : 1). *d*: BONE SNAILSHELL (1 : 1). *e*: GOLD POMEGRANATE-BUD PENDANT (3 : 1). *f*: GOLD ARGONAUT ORNAMENT (3 : 1). *g*: GOLD ORNAMENT (2 : 1)

may belong together and have been inserted in one piece through the globe. (PLATE 37 *d*, FIG. 1 *e*.)

39-175. Argonaut ornament, gold, single, for a necklace, pierced for threading, back plain, L. 0.015 m., W. 0.015 m. (PLATE 37 *e*, FIG. 1 *f*.)

39-176. Beads, paste, melon shape, grooved, thirteen (of which eight are yellow and five blue), L. 0.015 m., W. 0.05 m.

Beads, paste, globular, blue, three, black, two, grey, one, Di. 0.006 m.

Beads, paste, disk shape, grey, eight, Di. 0.006 m.

39-177. Beads, stone:

Pink stone, globular, one, Di. 0.01 m.

Carnelian, globular, five, Di. 0.007 m.

Carnelian, spheroid, two, Di. 0.008 m. and 0.006 m.

Carnelian, spheroid, one, Di. 0.01 m.

39-178. Beads, paste, carinated with vertical grooves, yellow, twenty-three, Di. 0.007 m.

Beads, paste, similar to preceding, yellow, two, Di. 0.017 m.

A study of these objects suggests the following explanation for them. The lily-shaped bone and ivory inlays look as if they had been intended for insertion as ornaments in some wooden object. It is possible that they once decorated a small wooden box for trinkets or jewellery. Evans illustrates such a box from the tomb of the Tripod Hearth at Knossos.⁶ This box we may then imagine to have contained a small collection of jewellery, a necklace with the argonaut ornaments, another necklace with the curvilinear triangle or shell ornaments, the pomegranate pendant, and two or three strings of beads of faience, stone, and paste. Such objects might well have formed part of the treasures of a shrine. Looters would have broken open the box which contained the treasures and carried off the objects of precious metal except for one or two small pieces which escaped them. They would not have been interested in the faience, stone, or paste beads.

The same deposit also yielded a number of fragments of painted stucco altars or tables of offering of the well-known Mycenaean type.⁷ These strengthen the suggestion that the deposit may have belonged to a shrine and so perhaps to the room which we identified as a 'Shrine'⁸ of the Palace and may have fallen or been thrown over the edge of the terrace when the building was looted, destroyed, and burnt.

In this same deposit were found portions of thirteen female terracotta figurines.⁹ Of these, two are almost complete and are good examples of the Psi type with hollow stem and polos. They have elaborate painted detail as is usual. There are also three fragments of bodies and hollow stems probably from the Psi type and one of columnar stem and six fragments of heads with polos. The most interesting, however, is the upper body of a large figurine of the Psi type. The width of the body across the arms is 0.11 m. It is of buff clay, fired rather soft and the paint is much worn. The breasts are applied lumps of clay and the decoration is unusual. This is somewhat similar to the example from Phylakopi,¹⁰ Athens, National Museum No. 5850.

Necklaces with a double or a single argonaut ornament are not rare among Mycenaean jewellery.¹¹ The shell-like curvilinear ornament is well known.¹² The pomegranate bud orna-

Beads, paste, spheroid, yellow, two, Di. 0.008 m.

Bead, faience, spheroid with vertical grooves, greenish, one, L. 0.01 m.

Bead, faience, cylindrical with vertical grooves, greenish, one, L. 0.01 m.

Beads, faience, spheroid with vertical grooves, yellowish, two, Di. 0.009 m.

Bead, faience, spheroid with vertical grooves, grey, one, Di. 0.007 m.

Beads, faience, carinated with vertical grooves, yellowish, three, Di. 0.007 m.

Bead, faience, lantern type, yellowish, one, Di. 0.017 m.

39-456. Ornament, curvilinear triangle or shell, gold, front and back alike, join in the middle of the base. A gold wire runs through it from top to bottom and has a loop for suspension at each end. The ornament suggests a bivalve shell. There is a row of small granulations set along the edge of the base. L. 0.033 m., W. 0.025 m. (PLATE 37 *c*, FIG. 1 *g*.)

⁶ *Prehistoric Tombs of Knossos* 44, fig. 40.

⁷ Wace, *op. cit.* pl. 100.

⁸ Wace, *op. cit.* 82. As remarked above, Professor Mylonas (*op. cit.* 61 *f*.) does not think this was a shrine, but a store-room.

⁹ I owe this note on the figurines to Miss Elizabeth Wace.

¹⁰ *Phylakopi* 202, pl. xxxix. 16.

¹¹ Evans, *Prehistoric Tombs* 58, figs. 60, 110, and *Tomb of Double Axes* 45, fig. 59; *BSA* xxv. 365, fig. 79 *a*. It is frequent in glass, e.g. *BSA* xxv. 383, fig. 89 *a*; Blegen, *Prosymna* figs. 305, 379.

¹² Evans, *Prehistoric Tombs* 76, figs. 85, 110; Vollgraff,

ment is not uncommon in the Mycenaean repertory of designs.¹³ The most striking is the lantern bead of faience. Beads of this type are fairly common, but seem to be restricted mainly to one period, the Amarna Period.¹⁴ They occur in Egypt and Syria as well as in Greece, and it is possible that the type originated in Syria or in its neighbourhood somewhere in the Levant, for it is best known at sites like Ras Shamra. The presence of a lantern bead among these objects would then thus date them roughly to the Amarna Period. If, therefore, we date the whole collection about the close of the fourteenth century B.C. after the beginning of the L.H. IIIB style, we shall probably be not far wrong. Such a date, as will be seen, does not disagree with Miss Porada's opinion about the faience cylinder which follows.

A. J. B. WACE

2. THE FAIENCE CYLINDER

This cylinder, as far as the poor preservation permits us to judge, shows three figures separated by two tree designs, advancing toward a bird. As noted by Professor Wace, the cylinder resembles western Asiatic examples of the style called Hurrian or Mitannian, with the latter term favoured by this writer.¹⁵ Characteristic of this style is the frequent use of faience and the predominance of cup-shaped depressions which create in the seal impression an effect of globular forms by which features such as caps, shoulders, and minor details of design are marked.

The most extensive material of Mitannian glyptic designs was discovered in seal impressions on the clay tablets of Nuzi near modern Kirkuk in northern Iraq.¹⁶ Another large number of tablets with impressions as well as cylinders of Mitannian style were found at Atchana-Alalakh.¹⁷ The date of the Nuzi material can be set between 1500 and 1350 B.C.¹⁸ At Alalakh the latest cylinders of Mitannian style were found in Level I, dated by Sir Leonard Woolley 1273-1194 B.C.¹⁹ Some cylinders from Alalakh so closely correspond to the style of certain seal impressions from Nuzi that one may assume the origin of the cylinders in a common workshop, perhaps located at Alalakh.²⁰ The greatest number of cylinder seals (as distinct from seal impressions) of what we call Mitannian style were found in Ras Shamra, according to C. F. A. Schaeffer.²¹ Unfortunately these cylinders cannot be used for comparison here because they are not yet published. Lastly, an important though somewhat peripheral place was Beisan in Palestine,

BCH 1904, 383, fig. 15. It is frequent in glass, e.g. *BSA* xxv. 383, fig. 89 j. The mould from Mycenae (Schliemann, *Mycenae* 107, fig. 162) was probably for casting examples in glass or paste.

¹³ Wace, *Chamber Tombs* 87 (75), 195, pl. xxxviii; an example in gold from Tomb 518.

¹⁴ There is an example in gold from Mycenae from Tomb 2, Tsountas, *EA* 1888, 137, which is No. 2307 in the National Museum, Athens. There is a faience example from Mycenae from Tomb 526, see Wace, *op. cit.* 94, 7 g, where other examples are quoted; see also *ibid.* 205. The gold specimens from the Argive Heraeum (Blegen, *op. cit.* 271, fig. 541), which are not later than L.H. I, are of a different type.

¹⁵ Cf. 'Seal Impressions of Nuzi', *AASOR* xxiv (1947) 11 (henceforth abbreviated as *Nuzi*).

¹⁶ For the bulk of seal impressions from Nuzi cf. *Nuzi* and also E. R. Lacheman, *Miscellaneous Texts from Nuzi* ii, *Harvard Semitic Series* xiv (1950) pls. 3-7 and 110-18. For cylinder seals excavated at that site cf. R. F. S. Starr, *Nuzi* (1939) pls. 118 D, E, G, H, 119 A-H. For seal impressions on

tablets said to have come from Kirkuk itself cf. G. Contenau, *Babyloniaca* ix (1926) 69-151, figs. 88-113 and 115-31.

¹⁷ Woolley, *Alalakh* (1955) pls. ix-lxvii *passim*.

¹⁸ The inception of the four to five generations observable in the tablets of Nuzi may be set about 1500 B.C. on the basis of the occurrence of the name of King Barratarna (or Shurratarna) of Mitanni on one of the tablets (cf. A. L. Oppenheim, *BASOR* xciii (1944) 16) dated by W. F. Albright and Sidney Smith in the early fifteenth century (cf. *BASOR*, *ibid.* n. 1). B. Landsberger places Saushatar, Barratarna's successor, about 1480-1455 (*JCS* viii (1954) 54).

¹⁹ Cf. Woolley, *op. cit.* 399.

²⁰ e.g. Woolley, *op. cit.*, nos. 21, 52, 54, 55, 102, and 104 belong to the closely related *Nuzi* Groups xi (nos. 467-91) and xii (especially nos. 497-508). *Alalakh* nos. 25-27 correspond to *Nuzi* nos. 35-37, of which only one example of an original cylinder was published from Nuzi itself (cf. Starr, *Nuzi* pl. 119 c).

²¹ Cf. *Stratigraphie comparée* (1948) 409.

where among a large number of other Mitannian cylinders one type occurs so consistently that it seems to have been made there.²² None of the well-defined groups from Nuzi, Alalakh, or even Beisan, however, include designs of the specific style in which this cylinder from Mycenae was made. This is distinguished by several features: the rendering of the head by a small globe from which a short oblique line descends to the shoulder; the robe which appears to be longer in front; the tree in the shape of a bouquet²³ with a disproportionately large central drilling and two descending branches below the middle; lastly the motif of a procession toward a bird.

The rendering of the head looks like a simplification of the manner found on a cylinder excavated by Professor Wace in one of the Mycenaean chamber tombs (Tomb 517, PLATE 38 b).²⁴ A small drilling indicates the cranium, from which mounts a curving line, perhaps meant to indicate a horn in the manner of the headgear of some deities pictured on other Mitannian cylinders.²⁵ An oblique line descending to the shoulder may be interpreted as the back-flap of the headgear or as hair. Two lines meeting at an angle form the nose of the bird-like face. Only the lines of the headgear differentiate PLATE 38 b from a group of impressions on tablets from Nuzi with the same linear and angular style.²⁶ In that group the figures have the same type of robes with vertical stripes, and there frequently appears the same tree design with opposite oblique lines on either side of a stem which ends at the bottom in a globular form. No cylinder seals of this type were found in Nuzi itself, and the group may not have originated there but in northern Syria, as suggested by C. F. A. Schaeffer for the example from Tomb 517.²⁷

A crude but related cylinder of faience with blue glaze (PLATE 38 d) was found at Beisan in Palestine in Level V, dated to the eleventh century B.C. by W. F. Albright,²⁸ a date which must indicate the time when the cylinder was discarded, not when it was made.²⁹ The design is less

²² The cylinders from Beisan were published with good photographs and reliable data by Miss Barbara Parker in her article 'Cylinder Seals from Palestine', *Iraq* xi (1949) 1-43, pls. i-xxvii (hereafter *Iraq* xi), to which references to cylinders from Beisan will be directed rather than to the often misleading drawings in A. Rowe, *Four Canaanite Temples of Beth Shan* (1940), pls. xxxvii-xl.

Of fifty-six cylinders of Mitannian style found at Beisan the following can be assigned to Group ii of the Nuzi imprints, *Iraq* xi. 35, 37, 39, 41-44, 46, 50, 53, 56, 60-65, 69-70, 71-73, 76, 82, 87, 88, 115. To these could be added a number for which there were no parallels among the impressions of Group ii of Nuzi. With the exception of *Iraq* xi, no. 35 and perhaps nos. 37 and 88 (the latter badly preserved) which have the precise and clean carving noted in the cylinders *Alalakh* nos. 25-27 (see n. 20), the cylinders from Beisan here listed all have simple, large, and rather sloppily cut (or moulded) designs, in which there may be noted a preference for rows of animals or fish and for vertical and sometimes horizontal panels filled with various patterns, usually a star impaled on a vertical axis (e.g. *Iraq* xi, nos. 43, 44). This entire group of seals from Beisan is stylistically consistent and could have been made in one workshop, which may have lasted for more than one generation since the cylinders cover Levels IX-VII.

²³ The writer has termed 'bouquet-tree' a design in which the crown is indicated by four or six (rarely two or eight) globular shapes arranged on either side of a stem which is topped by another globe of similar size, the whole design being reminiscent of an old-fashioned bouquet of flowers.

²⁴ Wace, *Chamber Tombs* 73, fig. 28.

²⁵ Cf. *Corpus of Ancient Near Eastern Seals* i (1948), nos. 1024-

8 (henceforth referred to as *Corpus* i). Only on a Mitannian cylinder found in Cyprus (*JHS* lxxi (1951), pl. xlvii b top) the enthroned figure has a headgear with one frontal horn, probably a side view of the horned headgear as seen occasionally in the rendering of gods, genii, and sphinxes with multiple-horned mitres (e.g. Lacheman, *Misc. Texts from Nuzi* ii, pl. 113, 278, 279; pl. 114, 83, 284).

²⁶ *Nuzi*, Group i, especially nos. 1, 2, 7-13, and 20, 21, though the last-quoted designs are more cursorily executed than the cylinder from Tomb 517 at Mycenae.

²⁷ *Stratigraphie* 411, end of n. 5. The appearance of a cylinder of Group i at Mochlos (see n. 30) tends to confirm this supposition.

²⁸ 'Excavations at Tell Beit Mirsim' ii, *AASOR* xvii (1938) 77.

²⁹ Only three cylinders of Mitannian style were found in Level V at Beisan: our PLATE 38 d and *Iraq* xi, nos. 120 and 121. The last-mentioned is an exceptional piece because of its fine cutting and its material, hematite (cf. also B. Parker, *Iraq* xi. 27), and was doubtless kept over a long period for these reasons. Though of humble faience and showing poorer cutting, the other two cylinders must also be considered as survivals in this level, to which only no. 161 seems to belong by right, with a tree of late Kassite or post-Kassite type (e.g. L. W. King, *Babylonian Boundary Stones* (1912) pl. liv, trees embroidered on the robe of King Marduk nadin-Ahhe of the eleventh century B.C.) and a large figure of late Middle Assyrian style (e.g. A. Moortgat, *Vorderasiatische Rollsiegel* (1940) nos. 590, 593, 594). Even *Iraq* xi, no. 30, the well-known cylinder of Level V (Rameses II shooting at a target), was probably kept as a venerated object in the temple of Rameses III in which it was found.

assured, less angular than that of the cylinder from Tomb 517 at Mycenae (PLATE 38 *b*) and more simplified. The headgear of one figure in PLATE 38 *d*, for example, is rendered by only one line which curves upward slightly in front, giving the impression of the brim of a hat; the brim of the second figure is scarcely visible in front. The cylinder from Beisan, furthermore, lacks a tree design but has a horned animal in a pose related to that of the example from Tomb 517 at Mycenae (PLATE 38 *b*), though on the Beisan cylinder (which is obviously a poor copy of a design like the one found at Mycenae) this pose has become unbalanced and awkward owing to such slight changes as the lowering of the animal's head.

A stag in a related pose, apparently with a bird above its back,³⁰ occurs on a poorly cut and badly preserved cylinder from Crete (PLATE 38 *c*), from Zafer Papoura Tomb 66. It shows three figures perhaps advancing toward the stag; the third figure seems to touch or grasp one of the two plants or poles which separate these figures. Whether the second figure also touches the plant or pole before it, cannot be determined.

Returning from *d* to *a* on PLATE 38 we find that there is some similarity in the general arrangement of the figures, which are separated by plant designs or poles and appear to be advancing toward a stag in *d* and a bird in *a*. Relations to cylinders from Beisan can be cited for both designs: for the motif of the figures with a stag in *d*³¹ and for the stylization of the bird in *a*. The latter is rendered with the same decisive curving lines for the body, drilling for the head, and two oblique strokes for the long legs as seen in a row of birds on a cylinder from Level VII at Beisan,³² dated by W. F. Albright in the thirteenth century B.C.³³ No western Asiatic scene, however, (as in PLATE 38 *b* and possibly also in *c*) shows more than one tree or plant design of the same type between the figures of a procession. On cylinders from Enkomi, however, assigned by Schaeffer to the Iron I Period (1200–1050 B.C.),³⁴ such processions, in which figures are separated by plants which they grasp, are a common motif. This difference between western Asiatic and Cypriote designs may reflect a difference in ritual practices.

For this reason it seems likely that our Mycenae cylinder (PLATE 38 *a*) was not made in a purely western Asiatic centre but rather in some place in the coastal or island regions of the eastern Mediterranean where the Mitannian style had found acceptance during the fourteenth and thirteenth centuries. Even people with a background of Aegean concepts were apparently willing to buy Mitannian-type cylinder seals which had been made attractive to them by slight changes in the arrangement and the appearance of the figures.³⁵ Such an explanation would account for the various divergences from Mitannian conventions in the figures on the cylinder, such as the robes which appear to hang down lower in front than at the back, in contrast with the usual western Asiatic renderings, in which the robe is shorter in front than at the

³⁰ Evans, *Prehistoric Tombs* 71, 117, figs. 81 *b*, 117. On a cylinder seal in the Metropolitan Museum, Acc. no. 26. 31. 297, which is contained in a bequest of seals from Mochlos by R. B. Seager, a bird is placed similarly over the back of a horned animal.

³¹ Cf. *Iraq* xi, no. 66.

³² Cf. *Iraq* xi, no. 69.

³³ Cf. 'Tell Beit Mirsim' ii, *AASOR* xvii. 77.

³⁴ Cf. Schaeffer, *Enkomi-Alasia* (1952) 88–96, pl. ii. 1, 3–5. Schaeffer suggested that these processions are derived from Syro-Palestinian prototypes. None of the published examples, however, shows a similar tree or plant design repeated in one and the same scene.

³⁵ A good example for such a transformation is a cylinder seal from Palaikastro in Crete (*BSA* xl (1939–40) 45, fig. 16) which shows a long-robed winged figure between two fish, and a bouquet-tree between two water-birds. The

manner in which the drill was used to produce cup-shaped hollows for the heads of the birds and the winged figure as well as for the bouquet-tree is Mitannian, as is the symmetrical arrangement of the scene. Yet water-birds with gracefully curving necks are not found in Mitannian seal designs, nor can one point to a parallel for the prominent position of the fish. Fish and water-birds, however, occur frequently in Late Helladic pottery designs and are also found on several Minoan and Mycenaean seals and impressions (e.g. Bossert, *Art of Ancient Crete* (1937) 226, fig. 389 *d*; 238, fig. 401 *g*; Evans, *Palace of Minos* iv. 2 (1935) 492, figs. 426, 427 for the water-birds; Evans, *op. cit.* 496, fig. 435 for a cylinder entirely decorated with a row of the type of fish found on the cylinder from Palaikastro). Obviously a gem-cutter familiar with Aegean preferences has adapted a design of Mitannian derivation.

back,³⁶ or marked by a straight line at the bottom,³⁷ or by one curving up slightly in the centre.³⁸ The unusual shape of the bouquet-tree with pendants might also be explained as a design of a man not bound by Mitannian usage, despite the fact that one crudely made tree design of somewhat related type occurs at Beisan.³⁹

In summarizing our finds concerning the two cylinders from Mycenae, we may say that the cylinder from Tomb 517 (PLATE 38 *b*) was made in western Asia within the orbit of Mitannian glyptic style, to judge by the close relationship with seal impressions from Nuzi. Those closest in style to *b* date mostly from the early part of the second generation of that city.⁴⁰ The cylinder from Tomb 517 at Mycenae, which had been found with L.H. I and II pottery by Professor Wace and had been placed in the fifteenth century by C. F. A. Schaeffer,⁴¹ may therefore be even more precisely dated in the middle of that century.

It might be added here that the horn-like projection of the headgear renders the latter not unlike a simplified version of a Mycenaean helmet as seen on the so-called Warrior Vase from Mycenae.⁴² This accidental similarity may have provided an attraction for the presumably Mycenaean buyer. The headgear of the cylinder, though not found in Nuzi designs, must nevertheless have existed in some other examples,⁴³ as indicated by the derivative design from Beisan (PLATE 38 *d*). In turn, the relations of the Beisan cylinder with one found in Crete (PLATE 38 *c*) lead to the Aegean region. Lastly, some similarity exists between the cylinder from Crete and our cylinder from Mycenae. Though not sufficiently close to indicate that both cylinders were made in the same workshop, this similarity suggests, nevertheless, that both originated in the same area.

Unless that area proves to be Ras Shamra, it should be sought on present evidence within those regions which were in close contact with Palestine, since the relations which could be established for our Mycenae cylinder (PLATE 38 *a*) point so largely to that country, specifically to Beisan.⁴⁴ Though the pottery from that site is insufficiently published, the presence of Mycenaean sherds in Level VII⁴⁵ indicates possible connexions with Greece, Cyprus, or Rhodes.

³⁶ e.g. *Corpus* i, nos. 1006 (middle figure), 1020, 1021 (the figures wearing mantles).

³⁷ e.g. *Corpus* i, nos. 1012, 1014-19.

³⁸ e.g. *Corpus* i, nos. 1013, 1032.

³⁹ *Iraq* xi, no. 84.

⁴⁰ *Nuzi*, no. 1 (early or middle Tehiptilla, second generation), no. 7 (eT), no. 21 (eT); only two impressions of the entire group were on tablets of the third generation; all others not listed here were from the middle or late period of the second.

⁴¹ *Stratigraphie* 411, n. 5.

⁴² Cf. Wace, *Mycenae* pl. 82 *a, b*; Bossert, *Ancient Crete* 72-73, figs. 133-4.

⁴³ It will be interesting to see whether the two cylinders from Ras Shamra, nos. 11201 and 7190, mentioned by Schaeffer as parallels for the cylinder from Tomb 517 at Mycenae, show this headgear.

⁴⁴ One of the two cylinders from the Mycenaean layers of the Argive Heraeum published by Blegen, *Prosymna* (1937) 146, from Tomb xxxviii seems to belong to the same type of crude but distinctive design as *Iraq* xi, no. 146 from Beisan Level VII (note especially the occurrence of what seems to be a tree, a standard, and between them an offering table? in both cylinders). Miss Parker draws attention to a closely related cylinder from a Mycenaean tomb at Enkomi in Cyprus now in the British Museum (*Iraq* xi, 32, s.v. no. 146). Again this group of three cylinders may pro-

vide a link between the Aegean and Palestine. Schaeffer, however, cites four cylinders from Ras Shamra as parallels for the example from the Heraeum (R.S. nos. 249, 13172, 7107, 6130). If these cylinders from Ras Shamra are indeed as close in style as the one from Beisan, we would have to look to Ras Shamra as the fountain-head for the relations with the Aegean and with Palestine.

⁴⁵ A. Rowe, *Topography and History of Beth Shan* (1930) 21, merely refers to a 'quantity of (Cretan) pottery', but W. F. Albright (*AASOR* xvii, 77) mentions Mycenaean sherds in Level VII, a statement confirmed and elaborated by I. Ben Dor, who suggested that the pottery from Beisan in the University Museum at Philadelphia be examined for the possible presence of Mycenaean sherds. I therefore wrote to Professor Machteld Mellink of Bryn Mawr College who kindly requested one of her students to examine the Beisan pottery for Mycenaean sherds. Mr. Ross Holloway has therefore kindly examined the pottery and reports as follows:

'There are three pieces of pottery which seem to me to be genuine Mycenaean imports:

'1. No. 29-103-412, Level IX, Room 1337. Wall sherd. On a cream ground sections of three undulating lines of dark brown paint. Two of them have a solid white centre line; one has a row of white dots. No doubt they represent the arms of an octopus. This piece must have come from a large and handsome vase.

The relations with the cylinders from Beisan established above for this cylinder from Mycenae also give some indication for its dating in the thirteenth century B.C. At that time no more Mitannian influences could come from northern Mesopotamia, because the style of that region had been transformed into the Middle Assyrian, as shown by seal impressions from Assur.⁴⁶ In Ras Shamra only a few degenerate cylinders of Mitannian style were made after the first half of the fourteenth century, according to C. F. A. Schaeffer.⁴⁷ Alalakh shows in Level II (1350–1273) to I (1273–1194) or clearly in Level I, one or two cylinders with busy designs related to the early Middle Assyrian,⁴⁸ while others are very cursory and degenerate,⁴⁹ comparable to this cylinder from Mycenae. The thirteenth century, a time when the international style of the Late Bronze Age began to disintegrate in many places, agrees with the date indicated by the circumstances of the excavation, L.H. IIIB as stated by Professor Wace, who is able to narrow down (see p. 200 above) the date of this seal as probably not later than the first half of that century on the basis of the lantern bead and the pottery with which the cylinder was found.

EDITH PORADA

Additional Note

It must be remembered that Furumark's use of the Beisan material for chronological purposes is based upon the dating in the original publication. The entire chronology, however, of the Palestinian Late Bronze Age pottery is under revision in the light of recent excavations.

A. J. B. W.

'2. No. 29–102–919, Level VIII, Room 1303. Three sherds; two join to form the shoulder of a stirrup jar. The third is probably from the same vase. The clay is cream colour with encircling lines in dark brown. The shape is possibly related to the following piece.

'3. No. 29–102–914, Level VII, Room 1263. Stirrup jar; about one-half of the vase is preserved, giving a complete profile. The clay is light cream, the decorations encircling rings of light red paint. The shape seems to me to belong to Furumark's class III A: 2 (–B); *Mycenaean Pottery* 614, no. 178 and *British Museum Catalogue* (1925) A 924.

'In addition to these imported pieces there are thirty-five examples of local imitations of stirrup jars. They are of a coarse buff to reddish fabric (often friable) and are sometimes decorated with broad encircling lines in a matt red. The shapes are ill-proportioned but tend to be globular rather than wide-shouldered and flattened as the two imported vases. Many come from unstratified material, mostly found in the neighbourhood of tombs. In particular, round Tomb 219 twenty examples, round Tomb 210 four, round Tomb 229 one. The stratified material I was able to locate is as follows:

Level VII, Room 1263, one example.

Amenhotep III Temple, one; Area CN II, 29 (18th Dynasty), one.

Level VI, Room 1588, two.

Area CN II, 7 (Early Iron Age), two.

The interpretations 'Amenhotep Temple', '18th Dynasty', and 'Early Iron Age' are those of the file cards.

As far as I can tell, this is the extent of the Mycenaean material. There are also a number of lentoid flasks from the site. They seem to be of local manufacture. The fabric is similar to that of the imitation stirrup jugs. Perhaps there may be some Mycenaean influence on them.'

⁴⁶ Cf. A. Moortgat, *ZA* (N.F.) xiii (1941) 50–88.

⁴⁷ *Stratigraphie* 409, in the layers of Ras Shamra I (3) (1365–1200 B.C.).

⁴⁸ Woolley, *Alalakh* no. 120, shows some resemblance to the impression of an earlier cylinder on a tablet dated from the second half of the reign of King Adad-nirari I (1304–1273 B.C.) to the reign of Shalmaneser I (1272–1243 B.C.). Moortgat, op. cit. 85, 87, Abb. 80, and Woolley, op. cit. no. 121, may also belong to a late and transitional group of Mitannian cylinders.

⁴⁹ Woolley, op. cit. nos. 122 and 144; no earlier examples of this degenerate group are known.

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PART III. A VOTIVE STELE

(PLATE 39)

IN 1950 a fragment of a votive relief, said to have been found at the Pezoulia (which is the general name given locally to the area round the Cyclopean Terrace Building),¹ was brought to Professor Wace, who included it with his Mycenae material and gave it the inventory number 50–512. It is now preserved in the museum at Nauplia. It consists of the upper right-hand portion of a pedimental stele of poor-quality white marble; the pediment with its acroteria is carved in relief upon a larger field of corresponding shape. There is a wide cornice below the pediment, underneath which a dedicatory inscription was carved in three lines. Below the inscription, the body of the stele contained a votive relief. The original right side of the fragment is preserved, although this is chipped and battered, obscuring some of the details at the edge. Elsewhere the stone is broken away, and the surface is so badly worn as to render the detail of the relief impossible to describe with any certainty. The preservation of the crowning central acroterion of the pediment indicates that a little over half of the total width of the stele survives, and the whole monument at its widest part (the base of the pediment) was some 35 cm. broad. The measurements of the fragment now preserved are: height 0.35 m.; width 0.2 m.; thickness 0.13 m.

The inscription, in letters 0.012–0.014 m. high indicative of the first century B.C. to first century A.D., reads as follows:

[...⁶:⁷...] Πύρραμος
[...⁶:⁸...] σι κατὰ τὰ
[...⁹–¹⁰...] χαριστήριον.

The letters are progressively more narrowly spaced in each succeeding line.

The final letter of line 1, though obscure, was read as *sigma* independently by Professor Wace and myself. With this name in the nominative case, no space remains for a patronymic, and it is to be presumed that the dedicator's name had a Roman element in it. The name Pyrramos with two *rhos* seems hitherto unattested: Pyramos with a single *rho* is well known from mythology.² It is possible that the *mu* of this name should be read as a *nu*. The photograph of the squeeze lends colour to the possibility, although on the stone itself *mu* seems to suit the traces better. If *nu* is in fact the correct reading, it may be permissible to see in the initial letter of the name a *tau* rather than a *pi*, and to suggest Τύρρανος. With a single *rho* and a duplicated *nu* this would be familiar enough; for a doubtful example with single *nu* cf. *SEG* xii. 434. It is perhaps sufficient to include in the text what seems to conform to the evidence of the stone, but to note that an alternative possibility exists.

In line 2 no letter follows the final *alpha*, despite deceptive traces to the contrary on the squeeze. The recipient of the dedication survives only in the initially preserved –ΣΙ. There are various possibilities here, among them [θεοῖς πᾶ]σι, a dedication unusual in the Argolid

¹ *BSA* xlix (1954) 267–91.

but restored in *IG* iv². 1. 307: [ταῖς Χάρι]σι would also fit. An extended dative such as [Νύμφαι]σι is perhaps hardly to be expected, but it is possible that some particular Nymphs are concerned: [Ὀρειά]σι would not fill the space, and, preceded by the definite article, would overfill it; but in view of the tree which appears on the relief [ταῖς Δρυά]σι is a distinct possibility. The area was well wooded in antiquity, and such a dedication would not be inappropriate. Nymphs were associated with sleep visions and oracular dreams as well as with natural features, and this would lend point to the succeeding phrase in the remainder of line 2 and the consequential restoration at the beginning of line 3. Another possibility for line 3 would be to read [πάτρια εὐ]χαριστήριον, but for a similar phrase to that suggested occurring in the same area cf. *IG* iv². 1. 497, 566. The whole dedication may thus be read as:

[(e.g.) Ἰούνιος] Πύρραμος
[ταῖς Δρυά]σι κατὰ τὰ
[προστάγματα] χαριστήριον.

The relief shows a figure, apparently male,² facing to the left, holding in his left hand some object with a curved end, perhaps a pruning-hook, and with his right hand laid upon a very schematic tree, the trunk of which ends at the top in three short branches. The details of the figure are worn away, but what remains of the head seems to indicate that it bore some head-dress. Since the width of the relief is half, or more than half, preserved, there seems hardly room for a balancing figure on the other side of the tree, but it is possible that one might be fitted in; that of a dog or some other animal would suit the suggested character of the dedication. The figure is presumably that of Pyrramos or Tyrranos himself, but the meaning of his gesture is impossible to decipher—perhaps a symbolic expression of gratitude for benefits received in the course of his agricultural labours.

The introduction of a tree as a feature of the landscape in relief sculpture is not uncommon in the Late Hellenistic Period,³ but the rendering is generally more naturalistic than on this relief, which is a poor piece of work from all points of view. As regards both the inscription and the relief the point of fracture of the stone is more than usually unfortunate, depriving us of a greater certainty about dedicator, god, and the composition of the scene which an extra centimetre or two could well have provided, and any suggestions about them must remain tentative.

A. G. WOODHEAD

² Neither Professor Wace nor I were in doubt that this was a male figure, but the squeeze gives it from some points of view a female appearance. However, apart from the fact that Nymphs and Graces are generally portrayed in a group, usually of three, the gesture and the object carried in the left hand seem more appropriate to the dedicator, depicting him in an act of gratitude and worship.

³ See A. W. Lawrence, *Later Greek Sculpture* pl. 58 b; F. Winter, *Kunstgeschichte in Bildern: Hellenistische Skulptur* 365, figs. 1, 2, 5, 6; 366, figs. 2, 3, 4; 371, fig. 5; M. Bieber, *The Sculpture of the Hellenistic Age* figs. 646–50, 652, 656, 658–9. I am grateful to Professor J. M. C. Toynbee for advice on the artistic aspects of this relief.

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PART IV. PREHISTORIC CEMETERY: A DEPOSIT OF L.H. III POTTERY

(PLATES 40-44)

INTRODUCTION

IN 1939, following up the suggestion of Tsountas that Schliemann's Grave Circle with the tombs found under the houses round it had once formed part of a Prehistoric Cemetery¹ which had been, so to speak, cut in two when the Lion Gate and Cyclopean Citadel Wall were built, we excavated an area north-west of the Lion Gate outside the walls in the hope of finding tombs belonging to the Cemetery. We were not disappointed and we found fifteen tombs ranging in date from Middle Helladic to Late Helladic II. A report of this discovery with an account of the tombs has already been published.²

In 1950 one of the objects of our excavation was to extend the exploration outside the Cyclopean walls of this area, now known as the Prehistoric Cemetery. The south-west corner of the area already excavated had proved to be rich in M.H. tombs (Graves XI, XIII-XV). We decided, therefore, to clear the immediately adjoining section to the south-east, where we hoped to find other graves of the Cemetery. The excavation was entrusted to Miss D. H. F. Gray, and her notebook has been freely drawn upon in the preparation of this report.

The part excavated divides naturally, as will be seen by the plan (FIG. 2), into a northern and a southern division which are separated by an east-west cross-wall (A-A on the plan).³ This wall is the eastern continuation of a wall found in the south-western area in 1939 just to the south of Grave XIII.⁴ Immediately to the east of Grave XIII the wall is crossed by a north-south wall, B-B, at a higher level. This later wall seems almost certainly Hellenistic, for it belongs to the uppermost strata of the area which contained Hellenistic tiles, loom weights, and pottery. It runs northwards for about 2.50 m. to 3.00 m. and then returns at a right angle eastwards, C-C, forming the southern boundary of the area excavated in 1939. The return at its east end runs into another, rather irregular north-south Hellenistic wall, D-D, which we took as the limit of our excavations in this direction.

We are immediately concerned in this report with the east-west wall, A-A, for just to the east of a point where it crosses a drain running obliquely north-westwards there lay a great deposit of broken pottery. The central part of the east-west wall A-A had to be removed to allow us to excavate this deposit of pottery.

The wall was about 0.57 m. wide and built with packed rough stones which showed no signs of clay mortar. The stone wall is here one course high, about 0.15-0.20 m., and, at a point just between the figure XVIII on the plan and the oblique drain, it had beneath it the great deposit of broken pottery already mentioned (PLATE 40 *a*). At this point over the deposit of pottery the height of the stonework was about 0.20 m. Beneath this lay the deposit of pottery, which was about 2.00 m. long and 1.00 m. wide and at most about 0.50 m. deep. Under it was a thin layer of earth, not more than 0.10 m. thick. This earth overlay a clay floor some

¹ See *BSA* xlv. 203 ff.; Wace, *Mycenae* 51.

² *BSA* loc. cit.; Wace, loc. cit.

³ We had hoped to check the plan on the site, but this has proved impossible. The Anastelosis Department has

dumped over the area here discussed a great mass of stones and earth, so that the excavation is now completely invisible.

⁴ See *BSA* xlv. 209, fig. 2.

0.15 m. thick which extended north, south, and east. It sloped from east to west and from south to north. The clay floor, since it extended both to the north and to the south of the wall, was presumably earlier in date. Beneath it lay several M.H. graves, nos. XVI–XXII to the north of the wall A–A and nos. XXIII and XXIV to the south of the wall. This floor seems to have been renewed more than once, perhaps three times. Below it and above the graves the bulk of the pottery found was Middle Helladic, with, in the upper layers, a certain amount of L.H. I–II ware. There were also a few L.H. III sherds which may be intrusive, having penetrated downwards where the floor is damaged. The floor then may be considered as post-L.H. II. The pottery in the deposit seems to belong to a phase when the floor was out of use. The general date of the pottery gives an *ante quem* date for the destruction of the building to which the floor belonged, and the *post quem* date for the building of the wall itself, which is of course dated by the pottery below it.

The report on the pottery which follows is the joint work of Mrs. W. J. Craig, Miss Elizabeth Wace, and Messrs. R. Hope Simpson and D. H. French, who studied it in detail in the Nauplia Museum in August 1956. The majority of the photographs were taken by Miss Wace with the assistance of Mr. French. In August 1957 Miss Wace and Mr. French checked the manuscript with the pottery in the Nauplia Museum and at the same time Mr. Charles Williams executed a series of drawings of it.

In the deposit were also found a number of small objects. There were a few steatite whorls, of which three were of the conoid type and one of the shanked or button type. There was also one double conoid whorl of clay. There were also portions of five female terracotta figurines and one animal horn.⁵ The most interesting of the female figures is a small example of the Psi type with the head missing (PLATE 41 *a*). It is unusual in that the breasts are applied and the stem though not columnar is solid. The decoration is normal and the finish good. It probably indicates a transitional type of the later L.H. IIIB Period. There were also the head and shoulders of an example of the Tau type with the usual elaborations of this type, two columnar stems of which one has the multiple wavy line decoration usually a sign of early date, and one small body fragment. The figurines thus fit well with the dating evidence afforded by the pottery.

The most important small object was an ivory model figure-of-eight shield (PLATE 40 *b*). This is 0.052 m. long and 0.036 m. wide at the wider end. It will be observed from the photograph that one end is slightly wider than the other. It resembles the model figure-of-eight shields in ivory from the House of Shields, but is a simpler representation and resembles the smaller rather than the larger examples.⁶ It does not have the trefoil sinkings for inlay which are such a feature of the larger examples from the House of Shields. It also lacks the vertical central 'trench' which many of those models display. The inlay is supposed to represent the dappling of the oxhide from which the shield was made.⁷ No explanation for the vertical 'trench' has yet been given. The House of Shields examples usually have on the back small holes for round pegs to fasten them to a background of some kind. This model example from the pottery deposit seems to show on the back a wide vertical strap running from the upper to the lower circle of the shield and leaving at the waist a gap through which an arm might be thrust to carry the shield when in use. It thus apparently differs from Miss Lorimer's interpretation to which reference has already been made, for it shows no signs of the framework of two staves which that interpretation demands. It also does not seem to have been intended as decoration like the House of Shields examples. Are we justified in considering it a good model

⁵ I am indebted to Miss Wace, who is making a special study of the figurines from Mycenae, for this note.

⁶ *BSA* xlix, pl. 34.

⁷ Lorimer, *Homer and the Monuments* 134 ff.

of an actual shield and that the wide strap and back are accurately represented? If so it would modify current ideas about the figure-of-eight shield as set out by Miss Lorimer. Or was this perhaps a pendant ornament to be threaded on a band for a necklace?

CATALOGUE OF POTTERY

EARLY HELLADIC

? One fragment; coarse red gritty fabric, smoothed outside. Black-brown monochrome paint, outside only. Incised parallel lines. From a closed shape.

MIDDLE HELLADIC

Grey Minyan. Five sherds from Kylikes. Two rims: one in-turned, one rounded. Di. 0-12 m.

Matt-painted. Two examples. One from large closed shape with one linear band; one from large open shape with groups of diagonal lines. Pink clay, buff slip in and out; blue-grey paint.

Polychrome. One sherd from closed shape. Reddish clay, highly polished outside; one dark linear band.

Coarse Ware. Three examples. One of buff 'oatmeal' fabric, buff slip in and out, polished; incised. One of thick buff fabric, burnished in and out. One small fragment of greyish fabric, burnished in and out. This is of angular shape and is possibly part of a two-handled goblet.

LATE HELLADIC

1. Painted Ware

A. Early examples not classified by pattern

L.H. I

Cup. (a) Rim, horizontal, recessed. Buff clay, polished in and out. Band of brown paint on upper and lower surfaces. Di. 0-12 m.

(b) Base with hollow foot and torus moulding, centre very flattened. Buff clay, very fine, polished in and out. Brown paint round base, dilute fine lines above, traces of further broad band.

L.H. II

Ephyrean. Three fragments. Two spreading rims; greenish-buff clay, high polish, brown paint. One body fragment with trace of unidentifiable naturalistic design.

The Cuttlefish (F 21) rhyton fragment (see below and PLATE 42 b) and Argonaut, &c., are probably also L.H. II.

Palace Style. Six examples. Patterns unidentifiable. Amphorae: coarse gritty clay, buff with buff slip outside only; lustrous black paint. Two sherds are slightly thinner than the others.

L.H. IIIA

Bowl, rim: offset, rounded. Greenish clay, finely polished. Red-brown paint covering the whole of the rim in and out. Di. 0-20 m.

See also below under patterns, e.g. Spirals.

B. Patterned examples

I. Classification by Pattern Types

Bull. ? Two examples. F 3. Krater rim (PLATE 42 b); buff clay, brown paint, added white. Piriform shape, closed; buff clay, red paint, worn. Designs very doubtful.

Crocus. ? One example. F 10. Type unparallelled. Buff clay, smoothed; very fragmentary and worn.

Papyrus. ? Two examples. F 11. Possibly of this design, possibly Multiple Stem and Tongue, F 19. Krater: type 47, 51, lower portion of double-curved stem. Thick clay, fine polish outside; red-brown lustrous paint. L.H. IIIA.

Bowl: double stem between parallel vertical lines. Reddish clay, buff slip; red-brown paint.

Both have accessorial linear decoration.

Flower. Sixteen examples. F 18.

Voluted. One example. Krater (PLATE 42 b): for type cf. 27, but no exact parallel; alternate with whorl shell. Fine clay, polished; red paint.

Hybrid. Kylix (PLATE 42 b): type 33. Rounded bowl and lip. Buff clay, lighter slip, polished; red-black paint; very worn. L.H. IIIA.

Mug. Two fragments from waist. Polished fabric; orange paint. Two other fragments.

Unvoluted. Stirrup Jar shoulder zone, type 119-20: nine examples including one complete (PLATE 41 c), which has Zigzag F 61: 3 beneath. One in combination with Multiple Stem and Tongue F 19. Three with very disintegrated design, reduced to dots only, but not L.H. IIIC types. Fairly fine fabric, buff clay, polished outside (though one pinkish clay, smoothed only); black or shaded brown paint.

Deep Bowl. Panelled: type 107. Two examples. Rounded rims; fine pink clay, buff slip, polished; red paint; worn. Also floral in type though apparently unparallelled.

Small open shape: ? Deep Bowl. Buff clay, polished in and out; dark brown lustrous paint.

Multiple Stem and Tongue. ? Six examples. F 19. Cf. Papyrus F 11, and Sacral Ivy F 12 (e.g. type 29). Deep Bowl, one example; type 37. Fine buff clay, polished outside; shaded lustrous brown paint. Three examples of unidentifiable types. Fine pink clay, slipped buff; or buff clay, polished; brown paint; one monochrome inside.

Closed shape. Two examples of similar fabrics, one very worn.

All have accessorial linear decoration.

Cuttlefish. ? Two examples. F 21.

Rhyton. Parts of tentacles of several examples (PLATE 42 b). Fine buff clay, well polished outside; shaded brown paint. L.H. II.

Unidentifiable shape. What appears to be a cuttlefish eye may come from a spiral. Fine grey clay, polished outside; lustrous black paint.

Argonaut. ? One example. F 22. Possibly parts of two coils below Rock work I. F 32: 5 hanging from rim. Shape unidentifiable, ? open. Very fine buff clay, polished in and

out; very fine red-brown paint. Ridge with dashes a little below rim. L.H. II ?

Whorl Shell (Murex). *c.* twenty-two examples. F 23. Double types 18–21, 23; single types 7–9. Krater. One with double type and panelled division (PLATE 42 *b*); one alternate with voluted flower (PLATE 42 *b*); nine general fragments. Heavy fabric, well finished; some soft and worn; others hard and in good condition. Clays grey, pink-buff. Black-brown or red paint.

Deep Bowl. Four examples (double types 19 and 20); one monochrome inside. One fragment single type, with Panel F 75:10.

Kylix. One example of design on its side (e.g. Furumark 'Composition' types). Three general examples. Fine fabric, well finished; buff and pink clays.

Mug. Two examples, double type (PLATE 41 *d*); very plain designs on good, fine, but not highly polished fabric.

All shapes except Mug have accessorial linear decoration.

Linked Whorl Shell. One example. F 24:2. ? Kylix. Buff clay, polished; fine brown paint. L.H. IIIA ?

Bivalve Shell. ? Two examples. F 25. Closed shape, ? Stirrup Jar. One type unidentifiable. Grey clay, smoothed; lustrous black paint. Other as in type 13, but one only used as the centre of a kind of pendant, cf. F 38: 9. Pink clay, buff slip; lustrous black-brown paint. L.H. IIIA–B.

Sea Anemone. Seventeen examples. F 27.

Cup or Kylix. Fragment, type 6, 9, 10. Fine fabric but not thin; high polish; lustrous black paint. L.H. II ?

Deep Bowl. Eleven examples. Variants of types 19, 30, 39, 40, 48 (PLATE 43 *a, c*). Fine fabrics of varying thickness; polished in and out; clay buff or pink; brown or red paint.

Also six examples probably filling ornaments: three closed, three open shapes. One with apparent floral design. Varied fabric.

Trefoil Rock Work. ? Two examples. F 29. ? Deep Bowl. Possibly part of type 10. Fine buff clay; polished in and out; lustrous brown paint. Also one of type 19 on Jug with Running Spiral F 46, see below.

Circles. Two examples. F 41. Deep Bowl. Type 14 (but not 'Stirrup Jar'). Buff clay, polished outside; dark brown paint. Type 20 used in conjunction with a Panelled motif and Space Filling Net. Rim fragment, spreading. Di. 0.18 m. Buff clay, polished; black paint, monochrome inside.

Joining Semicircles. Three examples. F 42. Jug: neck and shoulder. Row of loops hanging from broad band at ridged base of neck; combined with Foliate Band on shoulder rising from another band. Reddish clay, buff slip on outside and top of neck; fine, smoothed; careless painting; red-brown paint.

Deep Bowl. Two examples. Type 21: triangular patch. One rim, spreading. Di. 0.14 m. Both pink clay, smoothed; red paint.

Isolated Semicircles. Twenty-four examples. F 43. This pattern as used on the Deep Bowl shape is essentially a Panelled pattern. In one example (PLATE 43 *c*) it is combined with F 75: 5 or 18.

Deep Bowl, Stemmed Bowl, Krater. Nineteen examples. Types 13 (one only), 22, 38, and variants, others unidenti-

fiable (PLATE 43 *c*). Many monochrome painted inside. Fabric mainly fine buff, polished; decorated in lustrous shaded brown paint. A few, however, are of poorer technique and have the decoration less skilfully applied. These may be later in date. Rims rounded, slightly offset; except one which has an elaborate horizontal rim (PLATE 43 *c*). One handle has a 'splash' design. Linear accessorial decoration.

? Mug Type 22. Thick coarse fabric, polished; dull paint, worn.

Jug, neck. As type 22 but top group only; pendant from ridge at neck of vessel. Dull grey clay; dull brown paint.

Closed Shapes. Three fragments of unidentified types. One coarse ware, slipped; two fine ware; brown-red paint.

U Pattern. Two examples. F 45. Piriform Jar. Rim. Inverted design making band below rim. Fine buff clay, polished out and top of rim; black paint. Shoulder. Type 2 or 3, combined with line groups. Pink clay, polished outside; orange paint.

This pattern is also used as a filling ornament in conjunction with other patterns.

Running Spiral. Eleven examples. F 46.

Cup. Five examples. One line spiral with zwickel; one type 14–16. All fine buff clay, polished in and out; fine black lustrous paint. Rounded and spreading rims. Di. 0.10 m. L.H. IIIA.

Deep Bowl. Three examples including two rims (one black monochrome inside).

Jars. One with high neck, ridged at base. Design reversed ?, with U filling ornament instead of zwickel. Grey clay, smoothed; brown paint.

One narrow-necked jar. Solid centre spiral combined with ? F 29:19 S-shaped Trefoil Rock Work and with ? F 19 Multiple Stem and Tongue. Unusual.

One from below shoulder zone of Stirrup Jar.

Quirk. *c.* ten examples. F 48. (N.B. also used in various Panelled patterns.)

Jar, shoulder area, two examples. Type 15. Splaying rim of Piriform Jar; angular edge at lip. Fine grey-buff fabric, polished outside; brown paint. Linear accessorial decoration.

Deep Bowl. Several examples (three monochrome inside). Type 15, L.H. IIIB disintegration used as a band (PLATE 43 *c*), often with similar motifs. Fine buff or pinkish clay; some soft and smoothed, others polished; brown or red paint. One example has decoration of type 15 used vertically as a Panel. Linear accessorial decoration on all.

High-swung handle, possibly of dipper (F shape 236). Decoration type 5. Fine fabric, smoothed; brown paint.

Curved Stem Spiral. Nine examples. F 49. Types uncertain.

Mug. One example. Pink well-leigated clay, buff slip, polished; orange-brown paint. Three ribs just below rim. Linear accessorial decoration. L.H. IIIA.

Cup. Eight examples. Fine buff fabric, polished. Probably all L.H. IIIA.

Antithetic Spiral. Two examples. F 50: 9. Deep Bowl, rims (PLATE 43 *c*). Di. 0.14 m. Buff clay, smoothed; red paint, worn.

Stemmed Spiral. Two examples. F 51. Jugs, shoulder (PLATE 42 *a*). One nearest to type 6. Fine fabric, buff clay,

polished; red-black paint; much damaged and burnt. Other unparalleled but obviously derived. Rather reddish clay, not well levigated; buff slip outside, and inside of neck; smoothed, crudely painted. Accessorial linear decoration. The first example is probably early L.H. IIIB and the second a later derivative.

Cf. Running Spiral F 46: 35-37, also Curtailed Body Bulls F 3: 16 ff.

Wavy Line. Five examples. F 53. Cup: one example, type 32. Straight rim, no lip. Lumpy shape, wheel-made but poorly turned. Pinkish clay, buff slip, polished in and out.

Jars. Four examples. Types 17, 35. One a globular jar with vertical lug handles (PLATE 42 b); at least one a Stirrup Jar. Varying fabrics, rather worn. Linear accessorial decoration.

? *Chequers.* One example. F 56. Open shape. Dark vertical band with reserved squares. Thin fabric, buff clay, polished; dark paint.

Diaper Net. One example. F 57. Large open shape.

Parallel Chevrons. Eighteen examples. F 58.

Mug. Type 15 (PLATE 42 b). Fine but thick fabric; pinkish-buff clay, smoothed; brown paint. Ridges at waist. Late L.H. IIIA or early IIIB.

Stirrup Jar, shoulder zone. Three examples. Good fabric but worn paint.

Deep Bowl. Fourteen examples. Similar to type 17 where identifiable; at least one has the top chevron culminating in a spike. Slightly flaring rims. Fine fabric of varying thickness; pink or buff clay; red or brown paint, some very worn. Linear accessorial decoration.

? *V Pattern.* One example. F 59. Derivative of this motif or of Iris F 10 A. Series of small alternating solid triangles between parallel lines radiating from band at neck of jar. Grey clay, slipped, smoothed.

N Pattern. Two examples. F 60. ? Piriform Jar, shoulder. Type 2. Grey clay, smoothed; dull black paint, burnt? Deep Bowl (PLATE 43 a). Pink clay, fired orange, smoothed; red paint, monochrome inside.

Zigzag. Twelve examples. F 61, types 2, 3, 4, 13, 17, or 18.

Jar, shoulder. Four examples of fine fabric, polished outside; decorated in lustrous shaded brown paint. One in poor clay with dull paint.

Deep Bowl. Five examples. Four of moderate buff fabric, polished in and out; worn dark paint, one monochrome inside. Possibly of late date. One large straight rim with rounded lip. Thick pinkish clay, orange paint. Design type 17-18 immediately below lip.

Unidentifiable shape. One fragment. Buff clay, worn orange paint.

Stirrup Jar (PLATE 41 c). Body zone. See above, Flower F 18.

Linear accessorial decoration.

Tricurved Arch. Four examples. F 62. Bowl. Three examples. (a) Similar to type 15 with chevron filling ornament. Rounded profile. Thin fine fabric, pinkish clay, slipped, polished in and out; red paint. (b) Arch of four lines with U filling ornament. Fine fabric, yellowish clay,

polished; shaded brown paint. (c) Type 11, variant, (PLATE 42 b). Soft pink clay, smoothed; lustrous orange paint.

Mug. As type 28 (PLATE 42 b). No ribs. Fine pink clay, buff slip, smoothed and light polish; brown paint. Linear accessorial decoration.

Also, Bowl or Kylix (PLATE 42 b). Four-line ? chevron type design with U filling ornament; treatment, however, as in above examples.⁸ Early L.H. IIIB.

Foliolate Band. Five examples. F 64. Vaphio Cup. One example, type 6. Fine thin fabric, polished in and out; dark brown paint, very worn and faded. L.H. I or II.

Stirrup or Piriform Jar, shoulder zone. Two examples. Row of dashes, cf. type 21, but oblique. Buff clay, polished or smoothed outside; red paint. Linear accessorial decoration.

Open shape, ? Bowl. Two examples. (a) Series of curving dashes below rim. Slightly splaying rim; buff clay, fine polish; red paint. (b) Dashes in a panel with unidentifiable subsidiary pattern. Moderate fabric, dull black paint; pattern protruding into bands. Late L.H. IIIB? Linear accessorial decoration.

Also Jug, shoulder, with Joining Semicircles. See above.

Curved Stripes. Two examples. F 67. Jar, shoulder; as type 3, continuous not in groups. Fine buff clay, polished outside; dark brown paint, very worn. Linear accessorial decoration. L.H. IIIA?

Bowl or Kylix. As type 6 but a group of three. Fine thin fabric; pinkish clay, slipped, polished in and out; brown paint. L.H. IIIA?

Scale Pattern. Seven examples. F 70. Type 1 or 7, plain or with various internal ornaments (e.g. dots or dashes). Open shape, ? Krater. Three examples (PLATE 42 b). Thick but fine fabric, polished in and out; red-brown paint, rather worn; top surface of paint appears missing.

Piriform Jar. Four examples. Fine fabric, varying thickness; polished outside; brown paint, worn.

Triglyph and Half-Rosette. Eight examples. F 74. Deep Bowl. Type 5, one example of this alone (see also under F 75: 3). Rim, spreading. Di. 0.14 m. Buff clay, polished; dark paint. Type 6. ? Seven examples. Two rim sherds, one spreading, other thick, rounded. Buff clay, polished; red or dark brown paint.

Panelled Patterns. F 75. Over 200 fragments, almost all on Deep Bowls (shapes F 281, 284, 285). Di. plus or minus 0.16 m. A few examples may be from Stemmed Bowls (shape F 305). The examples below are all Deep or Stemmed Bowls unless it is stated to the contrary.

Fabric. There are several types of fabric that occur in the sherds of Deep Bowl shape. Of the total approximately 30 per cent. had a core of pink clay, 25 per cent. had a pink tone somewhere in the core, 15 per cent. had a core of deep buff merging with pink, while 30 per cent. had a pure buff core. All sherds appeared to have been slipped in pale buff. On sherds with any pink in the core there was, however, almost invariably a tinge of pink on the surface at some point. There was no tingeing on sherds with buff cores. The shade of core also directly affects the colour of paint. Whereas dark paint, i.e. dark red or deep brown, is found on pink cores, the typical even red is seldom found

⁸ Cf. Wace, *Chamber Tombs* pl. xvi, Tomb 505c.

on buff cores, where the paint is almost invariably some dark shade. The buff core seems to be a sign of hard even firing and the pink core of less hard. Certainly the softer surfaces, if not the biscuit as a whole, seem to occur on sherds with pink cores. The surface has worn on many sherds and is now very soft. The quality of both surface and paint is therefore difficult to judge. Paint on both types of core can be fine and even and fairly lustrous, but wear has dulled both red and black shades. Where paint is thinned or diluted it is, in general, a brown-red or yellow shade. Very lustrous pure red paint on a hard pink fabric with buff slip is a noticeably rare occurrence, whereas lustrous black, even or thinning, is frequent. Uneven firing conditions have also caused the shading of red and red-brown to black on different areas of the same vase. Polishing occurs obviously on a small number of these sherds. Where polish is preserved it is of extremely high quality and is combined with lustrous paint. It occurs on sherds of both buff and pink cores. The worn surface prevents the determining of the surface treatment of many others which were undoubtedly originally polished. As a criterion of date the fabric of individual pieces would appear not to have an overwhelming significance, though the poorer fabric in combination with certain pattern types may be taken as a sign of the later period. The proportion of sherds of poor fabric, however, of both pink and buff core seems to indicate a late period of L.H. IIIB, though good fabric does not belong exclusively to the earlier period.

Linear accessory decoration occurs on all sherds with lower body or rim preserved, in the form of bands or lines delimiting the pattern zone. The bands may be in groups of two or (on larger shapes) three and the lines in groups of five or six. Lines do not seem to be found on larger shapes. There are rather more examples with bands than with lines, which would seem to suggest that the lines are earlier in date than the bands. There is also a line or band on the lip which gradually evolves and deepens. This last feature differs on Stemmed Bowls (shape 305) and PLATE 43 *c* shows the typical arrangement of rim lines on this shape.⁹

Monochrome paint occurs on the inside of a large proportion of these sherds. It too appears to be a sign of the later development of Panel Style Deep Bowls.

Type 2 or 29. Simple vertical lines with semicircular fringe on either side of panel. *c.* thirty-three examples (PLATE 43 *c*). At least half have monochrome paint inside. This type of panelling is also used as edging for the centre panel type of design, e.g. with F 75: 5 or 18; with a pendant bivalve shell in a scale pattern (PLATE 43 *c*) (cf. F 74: 2); with a chevron F 75: 9; or with a vertical quirk pattern F 48: 15. About twelve examples of such elaborations were found in the deposit. They do not differ in fabric, &c., from the other examples.

Piriform Jar, neck. One example with Sea Anemone F 27: 34, very irregular, as filling ornament. Horizontal rim. Thick grey fabric, slip, polished; brown paint.

Type 3, 16, or 30. *c.* nine examples. Two have linear bands inside the bowl. One example is poorly fired in soft pink clay, with red paint. Three examples have F 74: 2, 5, and 6, Half-Rosette, as elaborations (PLATE 43 *c*).

Type 5 or 18. One example of design by itself; others in combination. Thin fragment, buff clay, polished; red paint. One variation of this type has widely spaced vertical lines (PLATE 43 *c*).

Type 6, 'ladder'. Stirrup Jar, shoulder. Pink clay, buff slip, smoothed, dark paint.

Type 8. Two examples. One with multiple vertical lines on either side of panel. Thick fabric, buff clay, smoothed. Other with two vertical lines. Buff clay, polished; red-brown paint.

Type 9 or 20. *c.* eleven examples including three rims, one of which has handle decorated with 'splash' design. Seven monochrome inside.

One example with semicircular fringe, see under type 2 or 29 above.

Jar, neck (PLATE 42 *b*). This motif in groups with lozenge F 73: k or y. Red clay, buff slip; dull orange-red paint; ridge at base of neck.

Type 10, 22, or 38. *c.* twenty-one examples. Often with additional vertical lines framing the panel. Three monochrome inside. Two have fine lines instead of thick bands in the lower body zone. One is of smaller size than usual. Di. 0.08 m., possibly Cup, shape F 214-16. This is sometimes the secondary motif and not the central panel.¹⁰

Type 11. One example. Thin fragment, buff clay, smoothed; dark paint.

Type 14. Two examples. (a) Combined with F 74: 5 (PLATE 43 *c*). Buff clay, polished; dark paint. (b) Thin spreading rim, Di. ? 0.13 m.; buff clay, polished; red-brown paint.

Type 17. ?Two examples.

Type 28. *c.* thirteen examples. Nine have monochrome paint inside. Thin fabric, buff clay, only one polished; black or very dark brown paint. Probably of late date.

With these can be grouped sixteen sherds of Deep Bowls showing only vertical lines of this type but possibly coming from more elaborate panel compositions. These are mainly of thin fabric buff to grey clays, polished, with red paint, though other variants occur. Several are monochrome painted inside. One has a rounded rim. These are not necessarily of late date.

Type 37. One example. Rim. Thickish fabric (shape F 281?), buff clay, polished; black paint.

Type unidentifiable. Five sherds, including three rims. Other two sherds have dotted filling, one horizontal, one vertical, from Panelled Patterns.

Stipple. Five examples. F 77. Type 2, well spaced but one at least close. Four from Kylix or Bowl. Fine fabric but not all thin; pink or buff clay, polished in and out; red, orange, brown paint. One from apparently closed shape. Fine thin fabric, pink clay; red paint. Linear accessory decoration. L.H. IIIA.

Ripple. One example. F 78:1. Vaphio Cup. Poorly finished inside. Fine fabric but not thin; high polish outside; very good lustrous paint. L.H. I.

II. Classification by Shapes

This list is for cross-reference to the more detailed pattern list. Only shapes identified with relative certainty are

⁹ Cf. *Hesperia* viii. 362, fig. 39, though these examples have vertical handles.

¹⁰ Cf. *Hesperia* viii. fig. 42a.

included. The order of shapes is that of Furumark. The patterns are given in each case in order of frequency.

Pithoid Jar, mainly *Piriform*. *c.* fifteen examples. Scale Pattern, U Pattern, N Pattern, Zigzag, Foliate Band, Quirk, Wavy Line, Panel with Sea Anemone filling.

Jar or *Jug*, type indeterminate. *c.* fifteen examples. Quirk, Stemmed Spirals, Joining and Isolated Semicircles, Running Spiral (in combination), V Pattern, Curved Stripes, Panel with Lozenge and alone.

Stirrup Jar. *c.* sixteen examples. Flower, Chevron, Foliate Band, Wavy Line, Bivalve Shell, 'Ladder' type Panel, Zigzag, Running Spiral in body zone.

Rhyton. One example. Cuttlefish.

Shallow Cup. *c.* eighteen examples. Curved Stem Spiral, Running Spiral, Stipple, Wavy Line.

Vaphio Cup. Two examples. Foliate Band, Ripple.

Mug. *c.* seven examples. Whorl Shell, Flower, Isolated Semicircles, Curved Stem Spiral, Chevron, Tricurved Arch.

Kylix. *c.* nine examples. Whorl Shell, Flower, Linked Whorl Shell, Sea Anemone, Tricurved Arch, Curved Stripes.

Krater. *c.* nine examples. Whorl Shell, Scale Pattern, Flower (with Whorl Shell), Isolated Semicircles.

Deep Bowl and *Stemmed Bowl*. *c.* 280 examples. Panel, Isolated Semicircle, Chevron, Sea Anemone, Triglyph and Half-Rosette, Zigzag, Quirk, Whorl Shell, Tricurved Arch, Running Spiral, Flower, Circle, Multiple Stem and Tongue, N Pattern, Joining Semicircle, Antithetic Spiral.

C. Fragments of Patterns not identifiable

Twenty-three examples of linear patterns, curved. Nine from Deep Bowls of which three are monochrome inside; one Stirrup Jar spout; thirteen from closed shapes.

Eight examples of linear patterns: straight, vertical, or diagonal. Two rim pieces of Deep Bowls, of which one monochrome inside; two others from Deep Bowl; three from ?

Thirty-four examples of patterns not in above groups. Ten from Deep Bowl of which seven are rims and two are monochrome inside; two necks of Jars of which one is ridged at base; two handles; eighteen ?

D. Hand-made Painted Vases

Small Spouted Globular Jug decorated with bands and vertical stripes. Irregular shape.

Five fragments of one vase: red clay with signs of smoothing. Linear bands in red paint.

Ten fragments of ? five vases. Small bowls or jars (e.g. shape F 126). Buff clay, cloth-smoothed; two appear polished also; four have panel design of vertical wavy line between parallel lines.

All are miniatures.

E. Linear Painted Examples

These examples are from the portions of vases decorated only in this manner, but the majority would have had some other form of decoration. However, it is noticeable in this

deposit that there are several examples of vases decorated with linear designs only (e.g. PLATE 41).

Kylix. Twelve bases. Di. 0.08 m. to 0.12 m.; with one (one example), two (most frequent), or three bands of paint; two are flat in section, the others concave; buff clay, only a few polished. One fragment of kylix stem. Six rims; one horizontal, others straight; linear bands outside, and on the horizontal example inside the rim; average size. Four small flattened handles with traces of decoration.

Dipper. One rim fragment.

Cup, rounded. One fragment of rim and handle. Pinkish clay, very soft, worn.

Deep Bowl. Four small examples of rim and one handle remaining. Di. 0.12 m. to 0.20 m. Clay buff to reddish; only one slipped; two smoothed, two polished. Line of paint around base of handle; rim has dots or band of paint; band below handles.

Examples with handles and part of body but no rim: fourteen large, twenty medium, thirty smallish. Handle with 'splash' design and line of paint around handle base. Paint worn and streaky; about half monochrome inside; clay buff to reddish. Seven handles only, with traces of paint.

Rims: seventy-eight examples mainly of slightly splaying type though ten are straight, three rounded, and about eight are similar to the splaying type but with a more marked lip. Nineteen have dots on the rim; the others bands and lines in and out in varying arrangements. Eleven have monochrome paint inside. A few are polished.

Bases. Thirty-five examples of ringed type. Linear band around outside of base, traces of other bands on body; inside unpainted, monochrome, or with multiple fine lines. Almost all buff clay, a very few polished. Fifteen examples flat bases slightly raised or ringed; variations of decoration as above. Two bases, flat, with angle of base to body not sharply defined; thin fabric, pinkish clay.

Some of these may come from Cups or other Bowl types.

One fragment of miniature Deep Bowl. Di. 0.06 m.; horizontal handle, slightly flaring lip; reddish clay, thick; ? buff slip, roughly smoothed; traces of red paint on handle.

Deep Angular Cup, rim: slightly flaring. Apparently only painted example of this shape (F 240). Di. 0.14 m. Fine buff fabric, polished; band of brown paint (worn) on rim, streaky monochrome brown inside.

Conical or *Pedestal Bowl*. Shape F 286 or similar. Five bases. Decoration of linear bands. Buff to reddish clay; three polished, two smoothed.

Open Bowl or *Krater*. Seven rim fragments, horizontal, horizontal rounded, or spreading (of which one has recess below rim). Di. 0.18 m. Bands on and below rim. Buff clay (one reddish, slipped buff, polished). One base, torus type.

Mug. Three examples. Two bases, one fragment of lower body. Circles on base, bands on body with reserved area between. Reddish-buff clay, polished; paint red-brown, worn.

Stirrup Jar. Three spouts of small vases, two of grey clay, one pink, smoothed; linear band at rim and base. Four fragments of handles and body of small vases; handle flattened; pink clay, smoothed. See also under general sherds below.

Piriform Jar. Eight examples of necks or rims (mainly splaying). Buff or grey clay; dark paint. One has reserved band on inside of lip; another spots on reserved upper surface of rim. Five fragments of necks, concave splaying; thin fabric, pink or grey clay. Either with bands, or monochrome outside to shoulder with one band inside rim. Two bases with linear band around them. Pink clay, poorly smoothed.

Globular Jar (PLATE 41 e). F shape 64. Two horizontal handles and two vertical pierced lugs in shoulder zone; short neck. It probably originally had a lid tied on through the lugs. Buff clay, reddish-brown paint. Linear bands on neck and body; 'splash' handles. Cf. *MV* xix. 140.

Jar or Jug. One example almost complete (PLATE 41 b) with linear decoration only. Two neck fragments from shapes as F 69 or 126; one large, one small; grey-buff clay, smoothed; bands of dark paint round rim and base of neck; splashes of paint on handle; other linear bands on body. One fragment of neck, shoulder, and handle; pink clay, whitish-buff surface. Seven neck and rim fragments. Di. 0.10 m. to 0.12 m.; spreading and rounded rims; buff clay, smoothed. Thirty-three other neck fragments, varying in size but mainly large; sixteen grey clay (three smoothed), seventeen buff (seven smoothed); dark paint in bands. One fragment of rim and handle of jug, as shape F 114 but larger. Di. 0.12 m.; flat handle from rim, rim short and spreading; reddish clay; reddish-brown paint, inside on rim and upper side of handle. Four bases of globular jars; three greyish clay, one pink; roughly smoothed.

Handles: twenty-eight examples round, flattened, or flat (rare) in section. One ribbed, another twisted. Fabric varied. Plain linear bands, 'splash' effect, or simple designs, e.g. ladder or broad zigzag (see also Furumark, fig. 66). Also nine other fragments of round vertical handles from large jars.

Pilgrim Flask or Bottle. Spout; buff clay; painted band on rim, three bands from handles to rim, paint also on handles. Di. 0.03 m.

Feeding Bottle. Shape F 79. Two fragments. Spout: pink clay with bands of red paint. Handle: flattened; transverse splash; monochrome neck.

Bridge-Spouted Jar. Fragment of rim and spout. ? Krater. Splaying rim. ? Di. 0.12 m. Buff clay, three bands of dark paint.

General sherds

Mainly from large vases. With three linear bands: thirty-five large pieces, twenty smaller. Sixteen of grey clay, two red, rest buff. Paint orange, brown, black. Over two-thirds from open shapes.

With two linear bands: thirty-six grey clay, dark paint; eighteen red clay, red paint; all these are large; 155 buff, mainly dark paint; mainly large shapes but some small and fine. About a quarter of all from closed shapes, of which some are Stirrup Jars.

With one linear band: fifty of grey clay, dark paint, one-quarter from small vases; nineteen of red clay, red or dark paint, mostly large; 250 buff, one-sixth red paint, one-third fine smaller pieces. Two-thirds of all from open shapes but some from Stirrup Jars.

All these are mainly smoothed with only a few polished examples.

Linear with monochrome paint inside: nine grey clay, nine reddish clay (all of fine ware with red paint); seventy-two buff clay, mostly fine with dark paint. About one-quarter polished.

Plain outside with linear decoration inside: ? Bowls. Six examples, all fine ware; smoothed; buff clay; red to brown paint.

Painted outside, linear inside. Fifty-two examples, all of fine ware. Six are of red clay; the rest buff with dark paint, of these seven are polished.

Multiple-line groups. Open Shape: twenty-three fragments, all but one of buff clay; fine ware. Closed Shape: forty-seven fragments, all fine ware. Six in reddish clay (three polished), all probably Stirrup Jars; four in grey clay, polished, three probably Stirrup Jars; thirty-two in buff clay (seven polished), ? twenty Stirrup Jars.

One example, multiple-line group outside, linear band and multiple-line group inside at bottom of bowl. Fine grey clay, polished; ? small fine bowl.

F. Monochrome Ware

I. Red

(a) c. forty fragments all-over-painted.

Notable pieces: Deep Bowl (PLATE 43 b). Shape F 284. Worn inside.

Four Kylix bases, unpainted underneath. Di. 0.08 m. to 0.10 m. One concave.

Four Kylix stems.

Two Bowl bases, flat, unpainted underneath.

Six Deep Bowl, rims straight or slightly spreading.

One Deep Bowl, rim, rounded.

Five Kylix rims, horizontal, rounded.

(b) Fifteen fragments, painted inside only. These include one Kylix rim of good fabric and one Deep Bowl base.

(c) Seven fragments, painted outside only. These include one flat base from a small Bowl or Dipper.

II. Brown to Black

(a) c. twenty-nine fragments all-over-painted from Bowls or Kylikes. These include:

One Kylix stem, streaky.

Three Krater rims, two horizontal, one sloping with plastic rib beneath.

Five Deep Bowl rims: two straight, one horizontal, one rounded. Two are of good fabric painted in streaky technique.

Two Kylix rims, one rounded, one horizontal.

(b) Twenty fragments, painted inside only. These include two Kylix rims, one rounded, one horizontal.

(c) Twelve fragments, painted outside only. These are mainly black. One sherd is of coarse gritty buff clay, smoothed only inside.

III. Comment

Fabric. This deposit has yielded few really fine hard sherds. Those of this type are mainly those painted inside only. Much is of soft clay and has worn badly.

Technique. Dull treatment on the whole. The period of experiment and interest in monochrome effect is obviously over. The paint is mainly used as a thinner wash.

Note. A number of these pieces may come from parts of patterned vases.

2. Unpainted Ware

Kylix. Shape F 267. Angular bowl with short stem; one vertical handle. *c.* 130 sherds, of which almost all are rim fragments. (Other portions of this shape are not so easily identified.) Of the rims about one-tenth are markedly offset, either flaring or rounded. The others have rims either very slightly offset or none at all. The clay is buff or pinkish and smoothed inside and out. Diameters vary between 0.10 m. and 0.16 m.

Shape F 273. With high swung handle. One example, handle and rim. Flattened handle but with top of loop round; rim slightly splaying. Buff clay, unsmoothed. Twenty handles, of which one is very obviously burnished. Buff clay.

Shape F 274. Rounded bowl with two vertical handles. Di. 0.10 m. to 0.18 m., but averaging about 0.14 m.

Plain Rims of rounded profile, often slightly in-turned. *c.* 100 examples, of which about one-quarter have vertical handles attached at rim. Buff or pinkish clay; one-quarter polished, half-smoothed, one-quarter unsmoothed or very badly worn.

Rims with spreading lip. *c.* 110 examples. Only four polished, one-quarter smoothed, the rest badly smoothed or worn. Some poor quality sherds of reddish clay, others buff.

Rounded Rims. *c.* seventy-five examples. Two polished; rest smoothed; the rest semi-smoothed or worn. Mainly buff clay, but some reddish.

Horizontal Rims. *c.* thirty-five examples, of which twelve are rounded. About one-third polished; others smoothed or semi-smoothed. Small proportion of reddish clay.

There are also about seventy sherds of Kylix rims of similar types but too small in size to be definitely assigned. The fabric and finish is similar to that of the other fragments.

Handles. *c.* 100 vertical handles that would belong to this type of Kylix or to Cups. One-fifth of reddish clay, the rest buff; about forty are smoothed, the rest roughly finished.

Two fragments have the handle set well below the rim and may belong to shape F 269. One buff, one pinkish; both smoothed; slightly out-turned rims.

Bases, belonging to all types of bowl. *c.* ninety examples. Eleven flat of which three have a flange; one-third conical of varying height, flat underneath, all but one showing the marks of the string by which they were removed; one-third flat but with semicircular concavity; one-quarter concave with semicircular concavity. All the flanged examples and four of the other plain flat ones are polished; the concave bases are all well smoothed but the others are less well finished, particularly the conical ones. Buff and reddish clay. Also twenty-eight examples of bases of which the profile cannot be identified.

Stems. Fifty-four examples, mostly short; buff clay, not well finished. Eight of reddish clay. Six well-smoothed examples, all buff.

Other fragments. Sixty-one definitely from Kylikes; mostly smoothed, a few polished; 263 fragments (100 polished or well smoothed) mostly from Kylikes, though less than a quarter may come from Shallow Angular Bowls or Cups.

Dipper. Shape F 208 or 253. Two examples. One a handle; fine buff clay, hard, smoothed; slightly ribbed (PLATE 44 a). Other smaller (PLATE 44 a), fragment of lower bowl only; light red clay.

Cup, rounded. Shape similar to F 220. Two examples, one with complete profile, other rim only. Pinkish-buff clay, smoothed. Two other fragments of rims appear to belong to Cups but may perhaps be of Kylikes. Buff clay, smoothed.

Deep Bowl. Shape F 284 (PLATE 44 a). This shape is extremely rare unpainted. Near-white clay, lightly polished.

Shallow Angular Bowl with flat horizontal handles. Shape F 295. One complete example, fourteen rims of which twelve have parts of handles. Clay: pinkish or buff except in two which are redder; smoothed inside and out. Di. 0.14 m. with one example smaller, one larger.

Fourteen handles or portions of handles of similar vases.

Open Bowl or *Krater.* Shape not definable. Nine fragments of rims; good buff clay, slipped in and out; rims horizontal rounded; Di. 0.20 m. and 0.24 m. Handles: eighteen rounded horizontal from larger examples, nine from smaller. To judge from their fabric, which is not always a fine buff, and from the condition of the inner surface, it may be that other shapes are represented here. A number of polished examples were noted among these fragments.

Bowl or *Basket* with suspension handle. Base slightly convex. Grey-buff clay; hand-made.

Semiglobular fragment with no base (PLATE 44 a). Possibly from a miniature, or a basket vase of some kind. Fairly fine thin fabric, slightly lumpy; pinkish-buff clay, slip; worn.

Mug. Shape F 226. About ten examples represented; one is partially reconstructed (PLATE 44 a). Di. at base 0.13 m., h. (existing) 0.156 m.; incised ribbing at waist; clay pinkish at core, surface buff, smoothed. Three other examples from rims; buff clay, polished; triple ribbing at rim. Di. 0.14 m. to 0.18 m. Remaining fragments are bases of same fabric but without ribbing.

Amphora or *Jug.* Four examples of large size. One has remaining the base, handles, and part of the body; another the base and neck. All four bases are of flat torus type. Di. 0.08 m. to 0.14 m. Handles where preserved are two in number, horizontal and round, set at shoulder. Probably storage jars. Fabric: good hard clay, pinkish or buff at the core; fine and smoothed. Two examples appear to have a very thin wash in a whitish-green colour.

Fragments: one rim and handle set vertically below, from a Jug or ? Hydria; also fourteen handles, two of which are definitely of round vertical type.

Three examples of small size; globular shape. Handles: round, set vertically to rim; slightly offset. Nearest to F shape 68. Fabric: hard pinkish-buff clay, fine and smoothed. One example contains a very small amount of grit.

Fragments: horizontal handles also were found belonging to these shapes.

Angular Jar. Shape F 93. One example. Metallic treatment of shape; horizontal rim; fine buff clay, smoothed.

? *Lid* (PLATE 44 a). Shape not shown by Furumark. This might, however, be a plate. Fabric: soft, fine, buff clay with a little grit; smoothed on convex side, rougher on other; flat rim offset inside; curve in section is very slight. Di. 0.32 m. Also similar fragment, ? polished outside.

Tray. Shape 322. One example, part of rim and horizontal loop handle standing directly on rim (PLATE 44 a). Fabric: reddish-buff clay, ? smoothed.

Unidentifiable Shapes

Sherds. Rim pieces of various types number forty-eight. Diameters ranging from 0.10 m. to 0.12 m. only. Fabric: buff with some pinkish examples; smoothed. Bases with diameters between 0.07 m. and 0.10 m., thirty-five in all: flat or raised, mostly the latter; clay buff to pinkish-buff; smoothed, though some may have been polished. With diameters ranging between 0.03 m. and 0.07 m., ninety-four in all: majority are flat or flat-raised (one-quarter) or torus (one-third); also found: hollowed and ring types; string-removing shows on three fragments. Fabric: buff to pinkish-buff, smoothed or (a very few) slipped; a little small grit in one or two examples.

In such a large number of bases doubtless many shapes are to be found; since some are finished inside, small bowls or even cups might be suggested as possible shapes.

Handles: a few vertical handles of flattened section, of which one is ribbed. Probably from jars or jugs. About eleven horizontal rounded handles, one large and probably from a krater.

Unidentifiable sherds of buff ware total 912; from jars or jugs almost certainly and probably from other shapes also. More than a third are quite fine and belong to small shapes; about 200 are polished.

3. Coarse Ware

A. Painted

Stirrup Jar. eighteen certain examples, fragments of disks, spouts, false necks, and handles. The largest, one of which is illustrated (PLATE 43 b), measure 0.10 m. across the disk. The colour of the paint varies but is almost invariably a dark brown or red, or a black. The decorations are linear, i.e. horizontal bands, or loops (PLATE 43 b). Handles may be painted with lines or dashes; spouts or necks with bands; disks with one or more circles; the body with one, two, or three bands, occasionally in combination with loops. The profile of the handles is usually for the coarse fabric, round; and for the finer, flattened. One spout shows Furumark type IIIA 2 late–IIIB.¹¹ The example illustrated (PLATE 43 b) is nearest to Furumark type IIIB. The fabric of this is light buff clay, hard and well smoothed; streaky brown paint. The handles are pierced with a single firing hole at the top and bottom.

Fabric: principally of three clays. (a) Buff clay, fine, without grit; fired hard (e.g. the example mentioned above, PLATE 43 b). (b) A coarse red-brick clay, gritty; not always fired hard. This clay is comparable to that of Cooking Pot, see below. (c) An 'oatmeal' clay: buff and gritty, with self-

slip without grit. The degree of hardness in firing in all three types, and the size and proportion of grit in the last two, is subject to some variation. Slipping or washing, almost invariable in the third type, is usual but not invariable in the other two.

Fragments: five possible examples, all bases from piri-form shapes; two have a torus-disk base, one of these is a very fine buff clay and might belong to the large illustrated example (PLATE 43 b); another to an example also included above.

Sherds: eight from their shape and decoration are probably from Stirrup Jars. All of coarse clay, decorated with one, two, or three horizontal bands and combined (rarely) with loops (PLATE 43 b). This illustrated example has a light buff slip; but there is at least one example, a small fragment from the ? base of a spout and false neck, which shows a white slip over a coarse brick-red clay, and has bands of dark paint. Rare among these sherds is the linear decoration in white paint on a coarse gritty red clay. There are only five sherds of this type (see also under miscellaneous below).

Jar. One example, a handle fragment in coarse buff clay; 'oatmeal'; dark paint; from a large storage jar.

Jug. One example, a neck fragment in coarse buff clay; 'oatmeal'; dark paint.

Jar or Jug. Three further examples of heavy, large vases. One, handle and part of body preserved, probably from a Hydria of shape F 128. Fabric: red clay, slipped in buff and smoothed. Handles round horizontal. Decoration: linear above and below handle; broad band round upper side of handle. The second is similar; slip is here reddish-buff. The third is a handle fragment, vertical, from a large, heavy closed shape; paint at base of handle and linear decoration.

Miscellaneous. Two bases belonging to ? a globular shape. One is painted in white on a gritty red clay.

Two vertical handles, painted; coarse buff clay.

The vase types of these cannot be identified but were probably jugs or amphorae.

B. Unpainted

Stirrup Jar. Only four certain examples, all of gritty brick-red clay; probably all, certainly one, covered with thin wash. Fragments of false necks, and one disk with flattened handles.

Stopper. Rough circle of baked clay. Di. 0.07 m.

Cooking Pot. Thirteen certain examples, large sherds from handles, bases, rims. Only two types of base, flat and torus. Handles are round, vertical, or (rarely) horizontal. Fragments from one pot show a flattened horizontal handle set a little below rim. Diameters of rim fragments vary between 0.12 m. and 0.20 m. Heights of neck fragments vary from 0.02 m. to 0.05 m.

Fragments. Seven torus bases probably from these vases. Di. 0.06 m. to 0.12 m. Twenty-two fragments identifiable as rim pieces. Nine handle-fragments, round, including one from a large pot.

Fabric: the clay is coarse, gritty, orange or red, smoothed. Only one fragment is slipped.

¹¹ Furumark, *The Mycenaean Pottery* 85.

Tripod Vessel. One example (PLATE 44*a*) differs considerably from shape F 320. It has a shallow bowl, angular, with flat horizontal handle; rim slightly offset. Fabric: fairly coarse but thin, buff clay, burnt black by use; unsmoothed.

Single legs of two further examples; clay gritty, black, smoothed. One is small and flat with rounded foot; the other large and flat. Also a leg fragment in a light-coloured gritty clay, smoothed, from large pot. These may of course come from the perforated tripod vessels or from the cauldrons, shapes F 315 ff.

Domestic Basin. Three examples (PLATE 44*b*). Fabric: thick, very coarse 'oatmeal', apparently wheel-made; colour of clay is a deep buff. Diameter of first, at base 0.24 m., at mouth 0.32 m.; height 0.14 m. Rim, thick and flat. Handles round and horizontal, set 0.04 m. below rim. Base flat. Sides curve out slightly. There is no parallel for this in Furumark, but the type has been found previously at Mycenae.¹² The others are similar but smaller; one has a vertical handle.

Miscellaneous. Seven fragments, rims, bases, handles of large shapes, possibly storage jars. The clay of all is gritty, red or buff in colour, and thick; all are well smoothed or

even slipped. Handles where existing are round and horizontal, set below rim on shoulder.

Sherds. 140 sherds of 'Cooking Pot' fabric. Two are extremely thick and should probably be classed as belonging to pithoi. Other smaller types of domestic vessels are likely to be represented in these sherds, to judge from their varying thickness. One sherd from a ? neck measures only 0.08 m. in diameter and is probably from a jar or jug.

From unidentified shape. Vertical flattened handle in a fairly coarse buff clay, clearly burnished. Other handle-fragments are probably from jars and jugs.

Coarse, large, smoothed: 377 of which over three-quarters are from closed shapes. Coarse, unsmoothed: 165 large, forty thin. 'Oatmeal': seventeen large, thirty-three small.

4. Later Intrusive Pottery

These examples are almost certainly due to infiltration. The pieces are all small and the shapes as a result unidentifiable.

Geometric: ten sherds. Protocorinthian: two sherds. Hellenistic: Black Glaze, four sherds; other ware, four sherds.

COMMENT AND SUMMARY

The pottery of this deposit, though it contains intrusive material of both earlier and much later date, can be assigned fairly definitely on stylistic grounds to the later part of the L.H. IIIB period. This is perhaps best seen in such motifs as Flower and Whorl Shell. In Flower the Kylix example (PLATE 42*b*) is a clear survival, but the bulk of the other examples are of the standardized later types. A Kylix survival is also found in the Linked Whorl Shell, while Cups with Spirals and Stipple as well as the Chevron Mug fragment also belong to this group. The Whorl Shell general examples, however, are all of well-known IIIB types, as are the motifs found on Piriform and Stirrup Jars. The whole pattern range is typical of the standardization of this period.

The deposit in general, however, is remarkable for one or two features: first for the nature of the deposit. The pieces are all small and only a relatively small proportion could be made up into complete vases, about a dozen out of the large total. It is therefore fairly certain that this is debris or a dump and not any kind of destruction level. Moreover, the nature of the pottery in the deposit indicates that this is house debris. The shapes of vases are those of domestic rather than of funerary use. Though jar and jug shapes occur in both contexts, the Deep Bowl (which is by far the most numerous single shape in the deposit) is rare in tombs, though very common in certain domestic contexts here and at other sites.¹³

The Deep Bowl shape and its accompanying decoration are in themselves particularly interesting and merit closer study than the scope of this report can give. The shape begins almost contemporaneously with the IIIB period,¹⁴ and its decoration exhibits all the tendencies of that period and the succeeding one continuing directly into Sub-Mycenaean and Proto-geometric. It has, moreover, been found in a number of key chronological groups¹⁵ and dating

¹² BSA l. 224, no. 17 (52-500).

¹³ Broneer, *Hesperia* viii. 363. It can also be noted that this deposit helps to fill the gap mentioned by Broneer (op. cit. 351, n. 28) of kraters from the Peloponnese. There are,

too, other examples from the Argolid of both Deep Bowls and Kraters unpublished in the Nauplia Museum.

¹⁴ Furumark, op. cit. 634.

¹⁵ e.g. BSA xxv. 20 f.; Broneer, op. cit. 362 f.

evidence derived from this type is often cited.¹⁶ Particularly the Panel Style is found frequently on this shape and on it shows its greatest development.

Preliminary study¹⁷ of the Deep Bowls from Mycenae has shown certain tendencies, some of which, in particular with regard to accessorial linear decoration and monochrome painting on the inside of the bowl, have been noted in the report. The Panel Style sherds in PLATE 43 *c* have tentatively been arranged to show the decorative tendencies. The group in this deposit, belonging as it does to the second half of L.H. IIIB, contains few examples of early types. Though PLATE 43 *c*, top row, and F 75: 11, of which there is only one example, might be assigned to the second quarter of IIIB, there are also a number of examples of incipient late types, e.g. F 75: 28. In general the Panel examples as well as those of the other designs exhibit little inspiration or ingenuity.

The majority of examples of Panel Style here represented belong to two main categories. Those in the top row of PLATE 43 *c* show what may be called the Open Style. This is the earliest style of the development, but with modification enjoys a long vogue, and continues parallel to other tendencies. The central panel becomes more highly elaborated in some examples; in others both central panel and secondary motifs are treated in a most summary manner.¹⁸ To be noted is the frequent use of the Chevron as a secondary motif in designs of this group of relatively early type.¹⁹ It is to this trend also, though at a later stage, that the use of the Anti-thetic Spiral belongs, though it is noticeably rare in this deposit.

The sherds in PLATE 43 *c*, centre row, are typical of what might be called the Filled Style. This occurs mainly on larger bowls²⁰ and on Stemmed Bowls²¹ and seems to be a secondary development from one stream of the early Open Style. There are a number of examples in this deposit, notably those with Isolated Semicircle design. Two other groups of Deep Bowls are well represented in the deposit (PLATE 43 *a*, *c*); those with horizontal designs between heavy bands,²² and those with single designs such as Sea Anemone in an open ground²³ in a rather debased Ephyraean manner.

Both these last groups are individually remarkably difficult to date, as they occur over a long period with definite variations in execution which are not always attributable to differences of date. Here they are relatively well established in their context, as is the whole range of Deep Bowls, and this deposit thus affords a good correlation between better attested patterns, and all these at an interesting stage in their development. Moreover, various Panel schemes which might otherwise be assigned to early L.H. IIIC or to a IIIB-C period can be shown here to have existed earlier, and more evidence can thus be gained to illumine the difficult transition between these periods.

Striking confirmation of the IIIB date can also be gained negatively from the complete absence of the Close Style or any of its immediate antecedents. For it must be carefully distinguished from the Filled Style mentioned above. In this the typical Close Style feeling, motifs, and elaborations are missing.²⁴ The presence in the deposit of a number of vases decorated only with linear decoration also tends to confirm the L.H. IIIB date.²⁵

The unpainted and the coarse ware add little to the evidence of dating, but serve to complete the picture of the domestic pottery of this period. One or two unusual examples are included, while others illustrate shapes or techniques recently noted elsewhere at Mycenae. The whole

¹⁶ Goldman, *Tarsus* ii. 205 f., 350 f.; Coche de la Ferté, *Essai de classification de la céramique mycénienne d'Enkomi* 17 f.

¹⁷ It is hoped to prepare for publication a detailed analysis of these examples and the comparative material.

¹⁸ Broneer, op. cit. fig. 29, 42; *MV* xxxiii. 328-30.

¹⁹ Furumark motif 58: 18; see examples cited.

²⁰ Broneer, op. cit. fig. 33, 35; *BSA* xxv, pl. v *e*.

²¹ *BSA* I, pl. 43i; also for both shapes *MV* xxxiii.

²² Broneer, op. cit. fig. 40, 41.

²³ *MV* xxviii.

²⁴ Furumark, op. cit. 563 f.

²⁵ Furumark, op. cit. 428.

range of these types of wares is becoming better known and they are taking their place in the chronological study of Mycenaean pottery.

Thus though the evidence of this deposit of pottery gives little exact information about the area where it was found and the sequence dating of this area seems indecisive, yet the deposit itself can afford other interesting chronological and stylistic evidence.

A. J. B. WACE AND OTHERS

MYCENAE 1939-1956, 1957

PART V. THE CHRONOLOGY OF LATE HELLADIC IIIB

THE sequence of styles in the evolution of Late Helladic pottery is now well recognized. A sequence dating of finds is thus archaeologically possible. Absolute dating of finds, however, is another and more difficult question. Nothing Late Helladic has any absolute date of its own. We can, however, arrive at approximate absolute dates from Late Helladic pottery found in datable contexts in Egypt or from Egyptian objects found in Late Helladic deposits in Greece. But we cannot always be sure that Egyptian objects found in Greece are contemporary with the Helladic objects with which they are associated. For instance, in Tomb 518 at Mycenae,¹ which is of L.H. I-II date, was found part of an Egyptian porphyry bowl which dates from the First or Second Dynasty. No one would for a moment believe that this Egyptian bowl and the tomb could be contemporary. There are similar cases from Asine and Knossos. It is logical that an early object can be found in a late context, but no one could ever accept that a late object can be found in an early context, unless there has been much disturbance of the stratigraphy.

The three phases of Late Helladic III pottery A, B, and C can be distinguished among themselves with reasonable certainty, although there are always examples which stand on the borderlines. We know that the later Late Helladic IIIA pottery is contemporary with the Amarna Age, because it occurred in quantity in the ruins of Akhenaten's capital. Its latest absolute date is about 1375-1350 B.C., according to the dating placed by Egyptologists on the Amarna Age. There are even a few sherds from Amarna which, if found isolated, might possibly be called L.H. IIIB. Here again another possible difficulty can be glimpsed. A borderline sherd might be called by one archaeologist A and by another B.

It is important for us to try to determine the approximate length of L.H. IIIB, because a great quantity of Mycenaean pottery of that period has been found not merely at Mycenae itself, but all about the Mycenaean world. It is in fact the most widespread category of Mycenaean pottery. In his suggested chronology for Late Helladic III pottery Professor Furumark² gives twenty-five years to L.H. IIIA 1 (1425-1400) and another twenty-five years to L.H. IIIA 2 *e* (1400-1375), and seventy-five years to L.H. IIIA 2 *l* (1375-1300). On the other hand he gives only seventy years to the whole of L.H. IIIB (1300-1230). There is so far known a much greater quantity of L.H. IIIB pottery than of all his three categories of L.H. IIIA. He says,³ however: 'The evidence from Gurob, in conjunction with that of the other finds here cited, indicates with absolute clearness that the transition between the Myc. IIIA 2 and IIIB styles should be placed in the time of Seti I, *i.e.* at *c.* 1300 B.C. It might be objected that the time thus attributed to the later phase of the IIIA 2 style, about seventy-five years, seems too long in comparison with the twenty-five years allowed for the earlier stage. It should then be remembered that the initial phase was one of transition, whereas the later phase is represented by the standardized *koine* ware, found in enormous quantities and bearing witness to stagnation and gradual impoverishment of style.'

Here two statements may be questioned. (*a*) Does the Gurob⁴ evidence indicate with absolute clearness that the transition from L.H. IIIA 2 to L.H. IIIB took place in the reign of Seti I?

¹ Wace, *Chamber Tombs* 223.

² *CMP* 115 f.

³ *Op. cit.* 114.

⁴ Fimmen, *Kretisch-Mykenische Kultur* 161 f., gives a good conspectus of the finds at Gurob.

(b) Where are the enormous quantities of L.H. IIIA 2 pottery? To take the second point first: it is well known that the amount of L.H. IIIA pottery so far discovered is small in comparison with the enormous amount of L.H. IIIB ware known to us. Owing to the manner in which Mycenaean sites on the Mainland have been excavated and published, this is not at once apparent, but anyone who has excavated at Mycenae or any Mainland Mycenaean site will agree. For instance, the great store of pottery from Petsas' House at Mycenae is of developed



FIG. 3. GUROB: BRITISH MUSEUM A 987

L.H. IIIB date.⁵ At Phylakopi the bulk of the Mycenaean pottery is of the same period.⁶ Further, in Rhodes, Cyprus, Syria, and Palestine the full L.H. IIIB style is far more plentiful than L.H. IIIA.⁷ It is not always clear either what induces Furumark to class a vase as L.H. IIIA 2 rather than L.H. IIIB. He even speaks of L.H. IIIA B and of possible sub-L.H. IIIA 2 classes.⁸ His division, therefore, between L.H. IIIA 2 and L.H. IIIB is by no means definite. In fact by bringing the end of L.H. IIIA down to the end of the fourteenth century he is automatically led to class as L.H. IIIA 2 / pottery which is better classed stylistically and typologically as L.H. IIIB. He rightly emphasizes the fact that his L.H. IIIB is a natural development of his L.H. IIIA 2. It is only by including in L.H. IIIA 2 all the transitional pottery (L.H. IIIA B and sub-L.H. IIIA 2) that Furumark can obtain the 'enormous quantities'

⁵ *PAE* 1950, 203 f.; *BCH* lxxv (1951) 113.

⁶ *BSA* xvii. 18 f.

⁷ Stubbings, *Mycenaean Pottery from the Levant* 11, 17 f., 37, 71, 79.

⁸ See Stubbings's remarks *op. cit.* 20.

of L.H. IIIA 2 ware of which he speaks. Developed L.H. IIIB is the great period of the *koine* and mass production, and even if transitional wares are withdrawn from it and added to L.H. IIIA 2 l, L.H. IIIB still remains far more plentiful than any other Mycenaean style.

As to (a), is the evidence of the Gurob⁹ pottery *absolutely clear*? We can set it all out in tabular form¹⁰ thus:

<i>Original publication</i>	<i>Museum no.</i>	<i>Egyptian date</i>	<i>F.'s date</i>	<i>Stubbings</i> ¹¹	<i>Notes</i>
1. (a) <i>Illahun</i> 17, pl. 17, 3	BM A 984	Amenhotep III, 1st year	IIIA 2/B, IIIB	IIIB	House Deposit, F late 171
(b) Ibid.	BM A 985	..	..	..	F late 171?
(c) Ibid.	Ashmolean 892	..	..	..	..
(d) Ibid.	Ashmolean 893	..	..	..	..
(e) Ibid.	Ashmolean 897?	..	..	..	F imit. 173 (? see CMP 116, n. 5)
2. <i>Kahun</i> 45, two vases ¹²	..	Akhenaten, 6th year	IIIA 2 l	..	Beneath wall of house above ruined temple of Akhenaten. F late 171
3. (a) <i>Illahun</i> 17, pl. 17, 28	..	Tutankhamen, 1st year	IIIA 2	..	House Deposit. F 171
(b) <i>JHS</i> xi. 274, pl. 14, 2	..	..	IIIB	..	F 183: 6
4. <i>Kahun</i> 42, 44 f., pl. 28, 7	BM A 986	Late XVIIIth dyn.	IIIA 2 l	c. 1300 B.C.	House. F 171: 36
5. (a) <i>Illahun</i> 19, pl. 20, 7	BM A 988	Late XVIIIth dyn.	IIIA 2 l	Late IIIA	House Deposit, Group 7, CMP 57. Sacrificial pit with burnt remains below house floor. F 178: 12
(b) Ibid. pl. 20, 9	..	Late XVIIIth dyn.	IIIA 2 l	Late IIIA	F 195: 14
6. <i>Kahun</i> 39, 42, 44, pl. 28, 1. Tomb 23	BM A 987	Seti I, 1st year or pre-Ramses II	IIIA 2 l	Late IIIA	F 171: 35
7. Brunton-Engelbach, <i>Gurob</i> 16, pl. 39, 29. Tomb 605	..	Ramses II, 1st year	IIIB	IIIB (p. 95)	Closed Group. F 182: 22

Only one find, no. 6 (here illustrated,¹³ FIG. 3), can be said to be near Seti I in date. Its context is said to be older than Ramses II, but how much older is not clear. In any case it seems unwise to use a vase so indefinite in type as a pivot for chronological purposes. As regards nos. 1 a¹⁴ and 3, the associations of some of these finds are Amenhotep III and Tutankhamen and they are called by Furumark Myc. IIIA 2 and Myc. IIIB. If L.H. IIIB did not begin until the time of Seti I, how can pottery of that style be dated to the reigns of Amenhotep III and Tutankhamen? On the other hand we can easily believe that L.H. IIIA pottery could survive until the time of Seti I. Nos. 4 and 5 fall late in the XVIIIth dynasty and are called Myc. IIIA 2.

⁹ Mr. Reynold Higgins has kindly given me information about the Gurob vases in the British Museum, and his colleagues Mr. Edwards and Mr. James of the Egyptian Department have generously checked Petrie's dating of the Gurob material.

¹⁰ I owe this table to Miss Elizabeth Wace. It is based on the lists given by Furumark, *CMP* 113 f.

¹¹ *Mycenaean Pottery from the Levant* 94 f.

¹² *Kahun* 45 compares these to pl. 29, 1. This is doubtless a misprint for 28, 1.

¹³ I owe this photograph to the kindness of the Trustees of the British Museum.

¹⁴ Furumark, *CMP* 116, says this is similar in shape to late Myc. IIIB types.

A dispassionate survey of all this evidence would suggest that L.H. IIIA lasted until late in the XVIIIth dynasty, the end of the Amarna Age in fact, and that some L.H. IIIB pottery had already appeared by the time of Tutankhamen. This supports the suggestion already made that L.H. IIIA ended approximately with the Amarna Age.¹⁵ The vase no. 6 is then a survival. Nos. 4 and 5 show that L.H. IIIA reached to the end of the XVIIIth dynasty, i.e. about 1350 B.C., and no. 2 confirms this. No. 3 bridges the change from L.H. IIIA to L.H. IIIB. The Gurob evidence then can hardly be said to make it 'absolutely clear' that the transition from L.H. IIIA to L.H. IIIB took place 'in the time of Seti I' as Furumark says, but only that it had already taken place by his reign. We are then justified in placing the transition from L.H. IIIA to L.H. IIIB at the end of the XVIIIth dynasty, in other words at the close of the Amarna Age.¹⁶

A. J. B. WACE

¹⁵ Wace, *BSA* xlviii. 15; *Proc. Am. Phil. Soc.* xcvi. 424.

the Near East, Studies presented to Hetty Goldman 126-35.

¹⁶ See Wace, 'Last Days of Mycenae' in *The Aegean and*

A HELLENIC FORTIFICATION TOWER ON THE KEFALA RIDGE AT KNOSSOS

(Knossos Survey 18)

(PLATES 45-46)

IN the course of a search for tombs in the Knossos area during the spring of 1951 I noticed some large blocks of limestone masonry with curved edges that had just been removed from a newly planted vineyard, the property of Georgios Kargatzes, near the top of the hill forming the southern end of the long ridge on the northern tip of which stands the Isopata Royal Tomb. The site is about 250 metres north-west of the Zafer Papoura cemetery of Late Minoan tombs dug by Evans in 1904, and at the bottom of the slope to the west is a high bank with important Geometric tombs (Knossos Survey 15), explored by Hogarth during the first year of the excavations at Knossos in 1900.

The curving blocks, together with the situation on the top of a hill less than half a kilometre south of the Kefala tholos tomb (Knossos Survey 8), excavated by Mr. R. W. Hutchinson in 1939, immediately raised hopes that another tholos tomb might await discovery here; and the fragments of Minoan pottery everywhere on and below the surface encouraged this belief. Dr. N. Platon, Ephor of Antiquities for Crete, visited the site and granted permission for the School to make trials to discover from what the blocks came. The Director of the School, Mr. J. M. Cook, gave his sanction for the work and asked me to undertake it. The plans were drawn by Mr. Piet de Jong, then the School's Curator at Knossos; the drawings of the vases are by Miss Susan Wood.

With excavation it became clear that the monument was not a Minoan tholos tomb, but a circular fortification tower of classical times. The tower is interesting as the first undisputed fortification of any period of antiquity that has come to light in the Knossos area.¹ It seems more likely to belong to an isolated fort than to form a part of a city wall round the whole of Knossos. The date when it was built cannot be fixed with complete precision, but it is certainly not earlier than the fourth century B.C. (see p. 226). It was in that period that a preference for round towers appears to have developed in Greece.² If our tower dates from then, a possible occasion when it might have been constructed is the war against Lyttos (346 B.C.), when Lyttos was helped by the Spartan Archidamus.³ But it may not be earlier than the third century B.C.

The tower (Plan, FIG. 1; PLATES 45 *a, c*; 46 *d*). The tower had been built on the angle where two curtain walls met. The soft *kouskouras* rock, only about half a metre below the modern surface here, has a slight downward slope towards the north and east in the direction which the tower faced. Only the foundations of the tower have survived: they are stepped down a course owing to the slope of the ground on the north and east; the thickness of the lowest course (on the east) is about 0.22,⁴ the upper course, only preserved on the west, is about 0.30 thick. On the east

¹ Apart from the possibly defensive character of parts of the Minoan Palace (*PM* i. 141; iii. 6, 262; iv. 77). But see A. W. Lawrence, *JHS* lxi (1942) 84.

² A. W. Lawrence, *Greek Architecture* (1957) 233. For a similar ground plan compare the large tower at Rhodes which Kontis would assign to the late second century B.C. (*PAE* 1953 (1956) 273 f., pl. i opp. 284, and 278 for the

date). Cf. also the towers flanking the gates (Αἱ Ἡλεκτραὶ) at Thebes, which may be late fourth-century (*ADelt* iii (1917) 7 f.).

³ See M. Guarducci, *Inscriptiones Creticae* i. 47. Cf. H. van Effenterre, *La Crète et le monde grec* (1948) 245 f.

⁴ Measurements are given in metres throughout.

edge of the tower the bottoms of the foundation blocks are nearly 0.20 above the surface of the rock, while on the west they are resting in a shallow cutting about 0.08 deep. The foundations were built of large rectangular or wedge-shaped blocks of dressed limestone, some measuring as much as 1.45 long, with a few in the lowest course of soft red sandstone; there was a filling of smaller blocks and rubble behind them on the inside. The cracks between the large blocks were packed with stone chips. One or two of the larger blocks in the upper course had dressed margins about 0.05 wide on the exposed outside face, together with a small lifting boss (PLATES 45 c, 46 c). Several of the foundation blocks had obviously been taken from earlier buildings or monuments, including a fragment of a tomb inscription (1 on Plan, FIG. 1; PLATE 46 e, f).

The foundations were about 6.40 in width. An incised line, visible in places about 0.10 from the edge of the upper foundation course, formed a circle exactly 6.17 in diameter, and evidently marked the edge of the lowest course of the tower itself. A wedge-shaped block, measuring 0.65 long by 0.35 wide and 0.30 thick, with a slightly curved edge, may have been a facing stone of the tower wall, but it was not found in position. A small patch of the core of this first course of the tower wall was preserved intact above the foundations on the north-west side (PLATE 46 d).

Level with the top of this patch of tower wall and only 0.30 below the modern surface was a layer of large cobble-like stones (some as much as 0.30 across), which may have been a pavement on the ground floor of the tower if it was hollow inside, or else, if it was solid, must represent the remains of a stone fill like the fill of the curtain walls (PLATES 45 a, 46 d). The walls of the tower above a certain height were no doubt built of mud brick, and it may have been roofed with tiles of which fragments were found in the excavations. Roofs were necessary to protect the engines planted on the tops of towers from the sun.⁵ There was no sign of a ditch in front of the tower or curtain walls, and no traces of any buildings apart from bits of tiles were detected inside the enclosed area.

The curtain walls (PLATES 45 b, 46 a, b). These, like the tower itself, were much destroyed, but the northern stretch of wall was better preserved than the southern. This northern wall was 2.15 wide at the lowest foundation level, having an outside and an inside skin, which varied from 0.40 to 0.80 in thickness, built of rather irregular blocks of stone with little or no dressing, and laid where necessary in a shallow cutting in the soft *kouskouras* rock. For most of the 10-metre stretch of the wall which was uncovered only this lowest foundation course, with its top about 0.70 below the modern surface, had survived; and in places even this had disappeared. But there were short stretches on the north outside face where two courses of the wall itself, each about 0.18 deep, were still in position above the foundations. These wall courses, built of small roughly squared blocks tending to a wedge shape, were stepped back, the first 0.10–0.15 from the foundation course, the second 0.10 from the first (PLATE 46 a, b). The way in which the north outer face of the wall joins the west edge of the tower foundations confirms what is in any case probable, that the walls are of a single period of construction with the tower. Between the inner and outer faces of the wall was a core of rough rubble, of which a patch had survived with the top only 0.20 below the modern surface at the east (tower) end of the wall (PLATE 46 a). Along the north outside face of the wall, beginning about 6 metres from the west edge of the tower and continuing beyond the area excavated, ran a narrow strip of pavement, 0.65 wide, which appeared to be of one construction with the wall, since in places it was bonded into it.

The southern stretch of curtain wall was much less well preserved than the northern. Only parts had survived of the foundations, with a total width of about 1.70, and nothing was left of the rubble fill which must once have existed. Where the rock dipped and the foundations ran

⁵ Lawrence, loc. cit.

over a pocket of earth they were two or three courses deep. This southern wall was traced by excavation as far as the path about 25 metres south of the tower (10 metres beyond the limits shown on the plan, FIG. 1). Farther south beyond the path exploration was impeded by a vineyard with large and old-established vines. In 1955 trials in the vineyard to the west found traces of the northern curtain wall still running on the same line 35 metres from the west edge of the tower. Here only the foundations 0.75 wide of the outer face survived at a depth of 0.60 below the surface. But trials along the line of the wall about 25 metres farther west on the edge of the vines, and in the olive grove beyond them above the bank with Hogarth's tombs, failed to reveal any further sign of it.

While therefore the possibility that the tower marks the north-east corner of a city wall round Knossos cannot be excluded, it is more likely that it is the angle tower of an isolated fort,⁶ for which the position on the broad summit of the hill with a wide view as far as Herakleion and the sea to the north, while overlooking the city of Knossos immediately to the south, is very well suited. It is in fact the most obvious site for such a fort in the area, commanding the possible line of ancient roads from Knossos to the sea, along the Kairatos valley on the east side, and along the valley between the tower ridge and the new Sanatorium on the west. In Minoan and in later Geometric times at any rate there was almost certainly an important route along the west flank of the tower ridge, where the modern path lies, marked by tombs like those dug by Hogarth (Knossos Survey 15) and by Evans and Payne farther north (Knossos Survey 7).

Date of construction. The time at which the tower was constructed cannot unfortunately be fixed with any great precision. The basic evidence is the inscription (1) below, apparently from a grave monument, built into the foundations of the tower itself, and assigned from the style of the lettering to the first half of the fourth century B.C. The tower cannot therefore be earlier than the fourth century, and a certain period of time may have elapsed before the monument from which the inscription came was destroyed for use as building material. On the other hand, in an emergency any convenient material that lay to hand might have been used, and only a year or two need have elapsed between the carving of the inscription and its incorporation into the foundations of the tower. There is, however, no evidence from the surviving remains of the tower and walls to suggest that they were built in an unduly careless or hurried way which might reflect such an emergency.

A small bronze coin (5) from the rubble fill of the northern curtain wall is likely to date from the third century B.C. at the earliest. The coin probably came from the fill of the wall, but it was found in the top of the fill and might therefore be a stray from the surface, or it might have slipped down through a crack in the fill in ancient times.

The water jar (2) was found on the rock against the south inner edge of the northern curtain wall. It seems that it must have been broken during the actual construction of the wall or later, but not earlier. The only comparable example which has been published from Knossos appears to date from the end of the fifth century B.C. But similar vases from excavations since the war which are not yet published were found in fourth- or even third-century contexts.

The tower and the walls therefore on the evidence available were not constructed before the beginning of the fourth century B.C., and may even date from the third.

Two small bronze coins of the Venetian period, one from the surface soil above the tower, the other found in cleaning the exposed foundations in 1955, may point to a time when the sur-

⁶ Cf. the classical fort explored by the Italians on A. Elias at Arkades south of Knossos, which has round towers similar to but smaller than ours (*Ann* x-xii. 32 f., pl. iii).

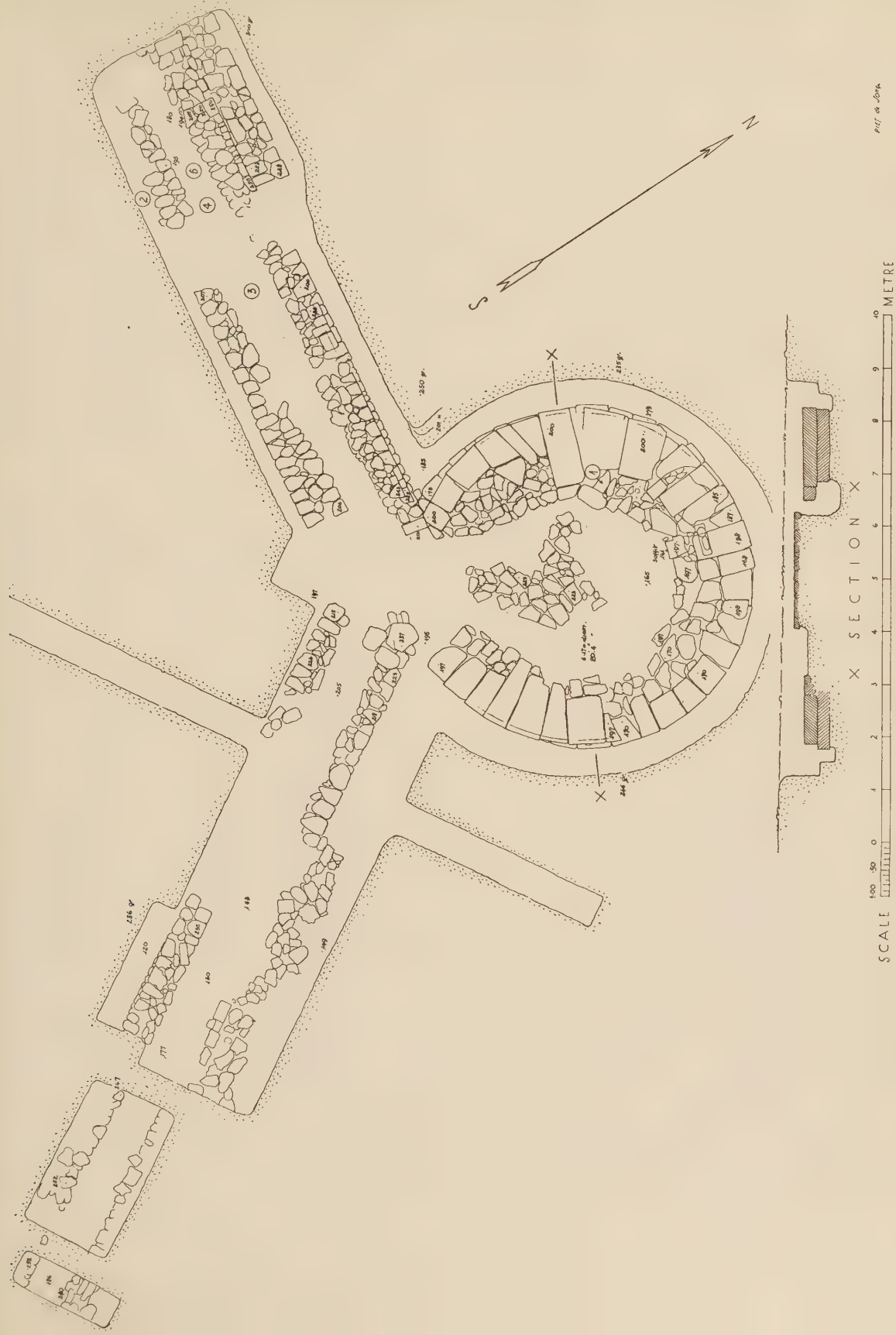


FIG. I. PLAN OF TOWER

viving ruins of the tower and walls were being used as a quarry, perhaps when the great Venetian fortifications of Herakleion were built.

Traces of Minoan occupation. A large quantity of fragments of Minoan pottery, but no complete vases, were recovered from the surface and from everywhere below the surface where the rock dipped and there were pockets of earth. Almost all this pottery appeared to be Middle Minoan, and dominantly Middle Minoan I in character. Small tumblers and egg-cups of Middle Minoan I type were much in evidence, and many sherds displayed the paring of the surface characteristic of that period. There were some scraps of fine ware, but little trace of painted decoration, or at any rate little that had survived; one or two fragments had barbotine ornament. This pottery almost certainly came from domestic occupation of some kind, and not from tombs, as a good many pieces of fresco painted red and blue were also recovered. Other finds of the Minoan period included fragments of stone bowls, lumps of worked steatite, presumably craftsmen's waste, and obsidian blades. A clay figurine of an animal, probably a bull or cow, and a small clay pellet with traces of a black wash might have wandered from some sanctuary.⁷

SINCLAIR HOOD

FINDS OF THE CLASSICAL PERIOD AND DATING EVIDENCE FOR THE TOWER

1. Inscription, probably from a grave monument (PLATE 46 *e, f*). Block of limestone, front face smoothed. H. 0.25. W. 0.50. Th. 0.26. Letters 0.047/50 high.

ΦΙΑΔΑΣ

No doubt [Ἀμ]φιόδας. Letters *c.* 400–350 B.C. I am indebted to Mr. P. M. Fraser for this note. Built into foundations of tower.

2. Fragments of a hydria (FIG. 2 (restored drawing), PLATE 45 *d*). H. *c.* 0.49. Pink clay with a buff surface wash. Poor black to brown paint. There is a light depression on the shoulder where it was struck before firing, and the neck is slightly squashed, making a broad oval of the rim. Painted within the rim for 0.013. From surface of rock by south inner edge of northern curtain wall.

3. Fragments of an amphora(?) (FIG. 3). H. *c.* 0.232. Soft red clay with a lightly polished surface. The complete profile is not preserved, but can plausibly be restored. Only part of one handle survives, but there were probably two. Below fill of northern curtain wall.

4. Fragment of an amphora or hydria (FIG. 3). H. (preserved) 0.094. Soft red clay with a little mica. Below fill of northern curtain wall.

5. Bronze coin of Halicarnassus. Diam. 0.013. Weight 1.3 gr. *Obv.* Head of Apollo facing left, laureate.

Rev. Eagle standing left, wings open. Above, AA. To the left, a lyre.

I am indebted to Dr. C. M. Kraay for the identification. From top of fill of northern curtain wall.

The decorated hydria (2) is of a type already known at Knossos. Fragments of similar vases were found in the surface level of the kiln published by Mrs. Homann-Wedeking in *BSA* xlv (1950), but no complete profile was recovered.⁸ The finds in this level seemed to form a closed group which was dated by the publisher to the end of the fifth century B.C. on the evidence of a locally produced bell-crater of debased shape found in it.⁹ A date in the first half of the fourth century would be perhaps equally admissible. Further fragments of these vases were found in a well on the Sanatorium site at Knossos in the company of plain black-painted vases of the turn of the fifth and fourth centuries. But others, from a second well, were found in a late-fourth-century context, and a fragmentary example, comparable in shape and decoration with our hydria (2), was recovered in 1957 from a deposit on the west side of the Royal Road with a piece of a Megarian bowl, probably of the third century B.C.¹⁰ There are a variety of rim forms,

⁷ For clay pellets from Middle Minoan sanctuaries, see Petsofa (*BSA* ix. 379) and Juktas (*PM* i. 153). Can these belong with the beetles of which models have been found in other contemporary sanctuaries? (For Platon's discussion of these, see Κρητικά χρονικά 5 (1951) 136 f.)

⁸ *BSA* xlv (1950) pl. 12, D, E.

⁹ *Ibid.* 171, 175, pl. 13, Aa.

¹⁰ These will be published by Mr. J. N. Coldstream, who kindly showed me the pottery from the first well, and informed me about that from the second and from the Royal Road area.

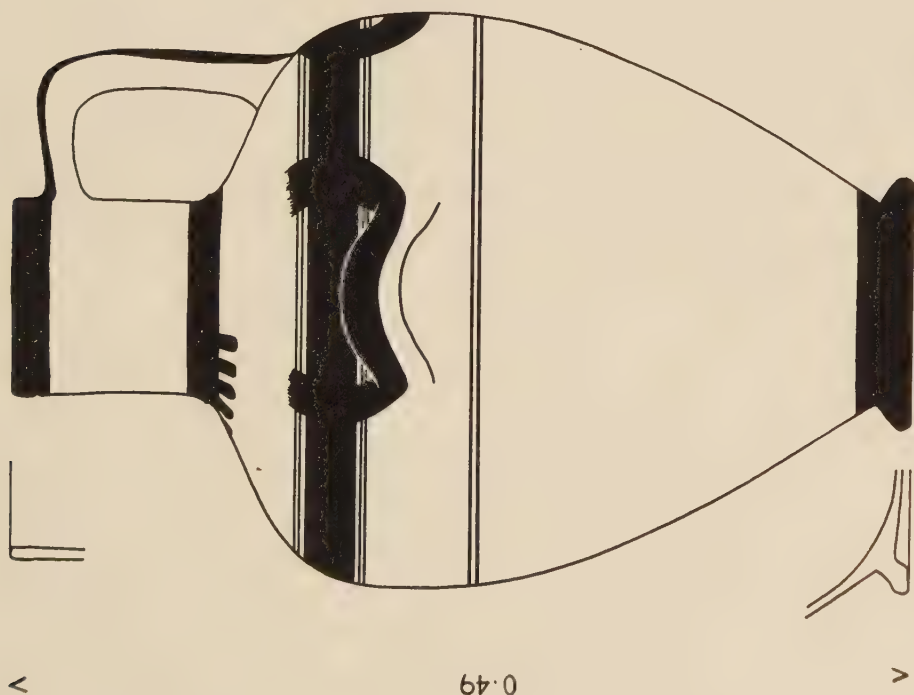


FIG. 2. HYDRIA (2)

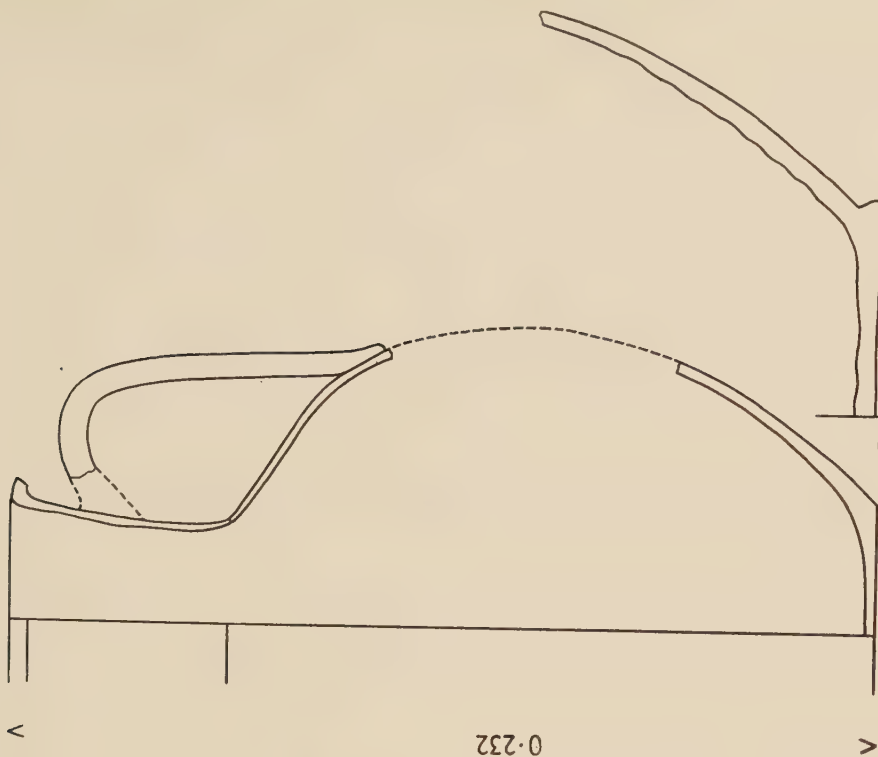


FIG. 3. FRAGMENTARY VASES (3, 4)

but the simplicity of ours need not imply that it is late in the series. The shape of the vase and its decoration with thick-and-thin bands and debased tongues on the shoulder has a long history with recurrent popularity in the plainer wares of different parts of Greece in different periods.¹¹ It seems to have enjoyed a limited vogue in late Classical and Hellenistic Knossos.

Other pottery from contexts before the construction of the tower and walls include fragments from black-painted skyphoi with turned-out rims of late-fifth- to fourth-century type, and of plain vases which cannot be precisely dated. The sherds from surface levels indicate few plain vases, but there are several from black-painted skyphoi with narrow, thick bases of the fourth or third century B.C. Fine fourth-century vases are represented by black-painted scraps with rouletting, an impressed palmette, and fragments from a ribbed kantharos. Of other shapes the bell-crater, bolsal, and ring-handled mug are represented, and there were stray Geometric and Early Roman fragments. The general impression is of domestic pottery, predominantly of the fourth century B.C., with little later. Two clay loom weights were found: one pyramidal, one a pinched lentoid.

The bronze coin (5) is of a type which may begin earlier than the date suggested in the British Museum Catalogue for similar examples. Our coin has a thicker module, rather like the earliest Greek bronze coins of the fourth century B.C., but it seems unlikely that it could be any earlier than the third century.¹²

The tile fragments are of the usual classical form with angular, not curved, ridge tiles. A fragment of painted tile was found above the rock, but the tile in the fill of the wall and the surface levels was not painted. A fragment of ridge tile with an angled end must be from a roof corner.

JOHN BOARDMAN

¹¹ From the 'waveline' hydriae of archaic East Greece (e.g. *CVA British Museum* viii, IIDp, pl. 1 (606), 4; cf. G. M. A. Hanfmann in *The Aegean and the Near East* 176-82), themselves dependent on Late Mycenaean prototypes, to the decoration of Hellenistic painted wares (e.g. G. Laroux, *Lagynos* nos. 35, 91-121).

¹² Cf. B. V. Head, *HN*² 618; *BMC Caria* 104, nos. 18-19 'early 2nd cent. B.C.?' But from *ibid.* p. lv it looks as if a third- rather than a second-century date is indicated. The *Fitzwilliam Catalogue* (iii. 187, 8491) certainly dates this type to the third and not to the second century B.C. Mme Varoucha of the National Coin Collection, Athens, who

also kindly examined the coin, would assign it to the third century while not excluding the possibility that it might even go back within the borders of the fourth. But Halicarnassus' silver coinage of the fourth century (*BMC Caria* pl. 18, 3), and that of the Carian dynasts, have the Rhodian Apollo head, which is frontal. The only other Apollo head appears on some small gold coins of Pixodarus (340-334 B.C.; *ibid.* pl. 28, 9-12), where the type is distinctly earlier than that on the bronze coins. There seems also to be a stylistic difference between the eagles on the silver (*ibid.* pl. 18, 3) and the bronze coins; the latter have a more fiery, Hellenistic set to the legs and wings.



Fig. I MAP OF MESSENIA & PART OF LACONIA

IDENTIFYING A MYCENAEAN STATE

(PLATES 47-50)

ἑπτὰ δέ οἱ δώσω εὖ ναιόμενα πτολίεθρα,
Καρδαμύλην, Ἐνόπην τε καὶ Ἴρην ποιήεσσαν
Φηράς τε Ζαθέας ἥδ' Ἀνθειαν βαθύλειμον,
καλήν τ' Αἴπειαν καὶ Πήδασον ἀμπελόεσσαν.
πᾶσαι δ' ἑγγὺς ἄλός, νέεσθαι Πύλου ἡμαθέντος.

(Il. ix. 149 ff., 291 ff.)

ANCIENT tradition, as recorded by Strabo and Pausanias,¹ placed the Seven Cities offered by Agamemnon to Achilles in the area of the shores of the Messenian Gulf, between Kardamyle on the south-east and Methone on the south-west. The phrase πᾶσαι δ' ἑγγὺς ἄλός roughly confines them to the coastal area, but it need not exclude identifications with sites farther inland, provided that these are not too far distant from the sea, and are connected with it by easy routes. For example, Kambos (?Ἐνόπη) and the site of the classical Thouria (?Ἀνθεια or Αἴπεια) lie 5 kilometres and 6 kilometres inland respectively, but their territory may have extended towards the coast, and the distance from the sea is not great.² I have assumed as a working hypothesis that the Seven Cities actually existed in the Late Mycenaean Period, although possibly with slightly different names, and although they are not mentioned in the Achaean Catalogue of Ships in the *Iliad*;³ and I have taken the position of Mycenaean sites in the area to be the most relevant factor to the problem of locating the Seven Cities.

I have carried out surface exploration in south Messenia over a period of five to six weeks with the purpose of finding out the pattern of the Mycenaean and earlier occupation of the district on the shores of the Messenian Gulf, and I shall give an account of the results obtained at each site, together with a discussion of previous work carried out by others, and then compare the facts with the testimony of the ancient writers, in particular Strabo and Pausanias, before stating my conclusions as to the locations of the Seven Cities, and attempting to reconstruct

This article is largely based on field-work carried out in autumn and spring 1956-7, supplemented by some unpublished results obtained by Mrs. H. Waterhouse before the War (whose work is here incorporated in the sections on Koutiphari, Kardamyle, Kambos, and Sotirianika). I was twice assisted in the field-work by Mr. David French, whose help was of great value on several occasions. I am greatly indebted also to Mr. R. L. Dalzell for his skill and patience in the drawing of the map of Messenia, FIG. 1.

I am very grateful to Professor A. Andrewes, Mr. M. S. F.

Hood, Miss S. Benton, Mr. G. L. Huxley, and Mr. Maurice Pope for reading drafts of the article in the early stages, thereby saving me from many errors, and for giving me much encouragement. I would like to thank especially Professor A. J. B. Wace, who first encouraged me to undertake systematic exploration in Laconia and south-east Messenia; and Mr. and Mrs. W. B. Wiegand of Connecticut, U.S.A., without whose assistance I should not have been able to complete this survey.

¹ *The Ancient Sources*:

Strabo 359-61.

Paus. iii. 26, 1-11; iv. 1, 1-4; 30, 1-31; 3, 34-35.

Select bibliography of modern writers:

Frazer, *Pausanias' Description of Greece* (1898).

Forster, *BSA* x (1903-4) 161-6, and 158-9 (a good description of the north Mani country). Hereafter called Forster.

Tod, *JHS* xxv (1905) 32-55.

Valmin, *Études topographiques sur la Messénie ancienne* (1930).

(This work is indispensable for an understanding of the topography of the district.) Hereafter called Valmin.

² Valmin 207 is probably right in saying 'mais ἑγγὺς ἄλός me semble signifier non "tout près de la mer" mais plutôt "touchant à la mer avec son territoire" '.

³ ii. 494-760. There are other notable omissions in the Catalogue, as is pointed out by Allen, *The Homeric Catalogue of Ships* (1921) 146.

their history. The relevant sites will be discussed in geographical order from south-east to south-west. (See the map of the area, FIG. 1.)

Since the northernmost city of Lacedaemon on the west coast of the Mani that is mentioned in the Catalogue of Ships is Oetylus,⁴ the question is raised of the status of the Mycenaean settlements at Koutiphari (the ancient Thalamae)⁵ and Leuktro (the ancient Leuctra),⁶ which lie near the coast, between Oetylus on the south and Kardamyle, the first of the Seven Cities, on the north. I shall therefore begin with a description of the sites at Koutiphari and Leuktro.

KOUTIPHARI, THE ANCIENT THALAMAE

The identification of Thalamae and the oracle of Ino-Pasiphae⁷ with the site of Svina near Koutiphari was proposed by Forster,⁸ and confirmed by the excavations of the British School at Svina.⁹ During the excavations two objects of pre-Hellenic date were discovered, part of a large stirrup jar 'of a species and size known to be Cretan', and half of a stone hammer of Neolithic date. The jar was of a kind frequently found on Bronze Age sites in Laconia and Messenia. It has now disappeared, but it was no doubt L.H. III in date, like the similar jars from Thebes and Tiryns.¹⁰ The type is now known to be mainland in origin, and so cannot be regarded as evidence of Cretan connexions. On the other hand, it is possible that the clay figure discussed below may be Cretan, and we should expect the Cretan influence suggested by the Oracle of Ino-Pasiphae to have originated in the Bronze Age. (If the lead figurines found in the tholos tomb at Kambos, described below, are of Cretan origin, it would be natural to suppose that there were other Cretan connexions on this coast.) The stone hammer might belong to any period in the Bronze Age, and is almost certainly not Neolithic.

On the high terraces between Svina and the mountains on the east immediately above the coastal plateau, I found a few rather worn Mycenaean (L.H. III) sherds. About 2 kilometres to the north of Svina, on the plateau between Koutiphari and Platsa, are wheel ruts worn in the hard limestone rock, running north to south, and close beside them to the east are the remains of extensive ancient quarries. I was told that between the plateau and the sea to the west there are many remains of ancient buildings below the ground; and there are enough classical and Roman sherds in the area to indicate the presence of a city. It is likely that the old city of Thalamae began on the higher ground near Svina, and later spread down towards the sea (as happened at Leuktro and Kardamyle). There is, however, on the small promontory to the south-west of Koutiphari, where stands the hamlet of Trachila, a hill which appears suitable for a Mycenaean acropolis, although no evidence of prehistoric occupation has yet been found there. In shape it is like the acropolis at Leuktro (see below). The sea has encroached on the arable land round the hill, which appears to be a shade more fertile than that on the terraces above it to the east.

Mycenaean Sherds found near Svina

Two fragments from plain kylikes.

Three fragments from deep bowls, painted in dull black monochrome inside and out. The clay is of buff colour and soapy, and the sherds are worn (L.H. IIIB-C).

Head of a clay figure found at Svina

Mr. G. Kondeas, of Svina, has recently presented to the

Kalamata Museum a clay head of early type (PLATE 50 a), which was found in a field near the well-house investigated by the School. The fragment is broken off at the base of the neck, presumably from a complete male figure. The height of the fragment is 0.105 m., the width 0.055 m., and the height of the head from the crown to the bottom of the chin 0.065 m. It is made of brownish clay, not well levigated,

⁴ *Il.* ii. 585. Forster 160-1.

⁵ *Op. cit.* 161-2.

⁶ *Ibid.* 162.

⁷ Paus. iii. 26, 1.

⁸ Forster 161-2.

⁹ *BSA* xi (1904-5) 124-36.

¹⁰ Furumark, *The Mycenaean Pottery* (1941) 610, form 46, 164. The examples from Thebes are illustrated in *AE* 1909: 97-98, figs. 16 and 17.

flecked with white, and ornamented with dull black paint. The head is modelled in a primitive style, but the effect is noble and dignified. The nose and chin are prominent and exaggerated; the eyes protrude and are circled with black paint, and the pupils are shown by large black dots. The ears are plastically rendered, thin and edged with paint. The neck is long, and the crown of the head is high and domed, and adorned with two thin parallel rings of black paint, presumably representing a cap or helmet. The pointed nose and chin (perhaps indicating a beard) and

the rudimentary 'pouting' slit mouth resemble in style the Cretan idols of the Sub-Minoan period from Karphi and Gazi;¹¹ but there is also a parallel figure of L.H. III date from Asine, the so-called 'Lord of Asine',¹² which is also painted, and has a somewhat similar stylized chin, probably representing a beard. On the whole it appears more likely that the Svina head is of Late Mycenaean than of Proto-geometric or Sub-Minoan date, but it could belong to either period.

LEUKTRO, THE ANCIENT LEUCTRA¹³

The acropolis of Leuctra (PLATE 47 *a*) lies near the present coastal village of Stoupa, about 5 kilometres to the south-east of Kardamyle, and about 1 kilometre inland. It is a fine natural fortress site, since the hill rises sharply 25–30 metres above the surrounding plain, and commands the whole of it, as far south as the little harbour village of Selenitza, 2½ kilometres distant, and

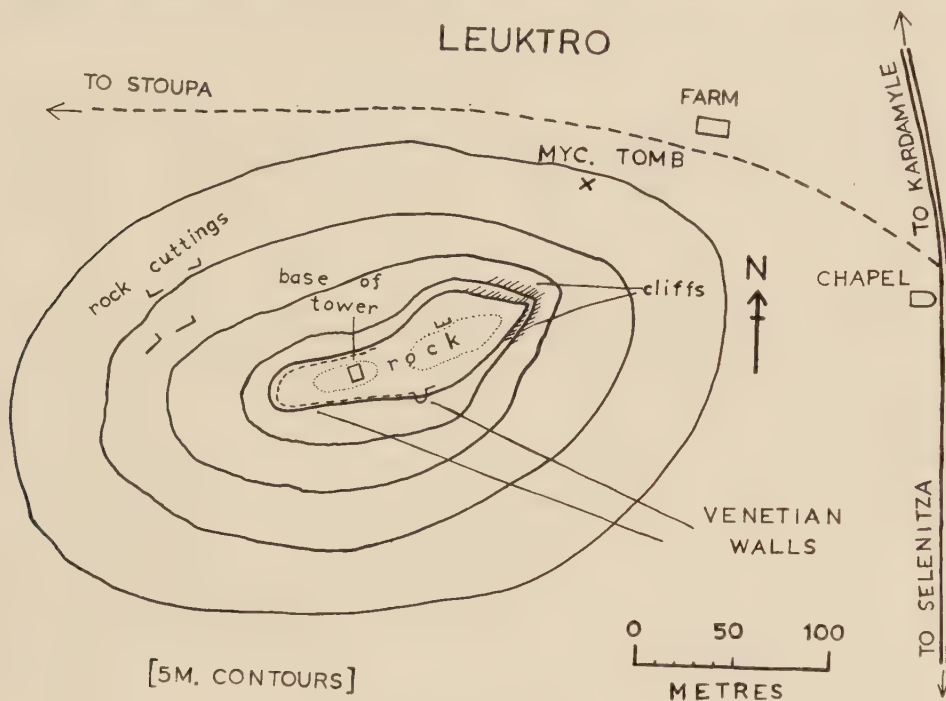


FIG. 2. LEUKTRO

the river Milia. The hill covers an area of about 250 metres by 200 metres (FIG. 2), and the Venetian fortification walls on the summit enclose an area only 100 metres by 40 metres. It would have been easily defensible in ancient times, being steep on all sides, especially the east. At the north foot of the hill are the remains of a Mycenaean chamber tomb, recently destroyed

¹¹ *BSA* xxxviii (1937–8), pl. 31 (from Karphi); *AE* 1937, 278–91 (from Gazi). Similar also are some small idols from Hagia Triada, illustrated in *Ann* x–xii (1927–9) 614, fig. 647, and 618, fig. 650. A figurine from Eutresis (Goldman, *Eutresis* 197–8) has similar painted eyes; and cf. also Athens Nat. Mus. 2595 (exhibited in the Mycenae Acropolis case),

and *AM* lxx (1940) pl. 36, 386 (j) from Sanos.

¹² Frödin and Persson, *Asine* (1938) 307, fig. 211. Cf. Nilsson, *The Minoan-Mycenaean Religion* (1950) 110–116, fig. 32; and the figurine published by Mylonas, *AJA* xli (1937) 237 ff.

¹³ Forster 162; Valmin 203–5.

when it was enlarged to serve as a store for hay. The dromos has vanished, and the right side of the doorway alone is preserved. This has been cut back a little at the edge for a width of about 0.15 metre, a decorative feature I have found also on the doorway of a plundered tomb in a large Mycenaean cemetery on a hill near Mavrovouni (about 3 kilometres to the south of Gytheion in Laconia). Other examples of this feature have been found at Knossos and Mycenae.¹⁴ The original contents of the tomb have disappeared, but a glass bottle and a flagon of Roman period were found inside when the chamber was cleared. Valmin found some Mycenaean sherds of the L.H. III period on the site, and I found a few others, but most of the surface pottery dates from the classical to the Roman periods. On the south-west side of the hill are some large rock cuttings, which are clearly ancient quarries, of the same type as those at Kardamyle (see below), and possibly of classical date. In the fields between the acropolis and the village of Selenitza are the remains of a Roman, and apparently also a medieval settlement.

? Early Helladic

In the museum at Kalamata is a bored celt (PLATE 50 *d*, *c*), which is said to have come from the acropolis at Leuktro (marked Κόστρο Πολυδεύκης), of light-green speckled stone. It is now in a worn condition, but it was originally highly polished. It is 0.08 m. long and 0.065 m. broad. It is of Wace and Thompson type E, and closely resembles another example from Zerelia in Thessaly.¹⁵ But it may, nevertheless, be of M.H. and not E.H. date, since at Asea the type

persists through E.H. into M.H., and at Eutresis and Asine all the bored celts are dated to the M.H. period.¹⁶

Mycenaean sherds from the Kastro

One plain kylix foot.

Two handles of deep bowls, with dullish monochrome paint inside and out.

A fragment of a jug neck with a horizontal band of paint. A few other sherds seem to be of Mycenaean fabric. The pottery is all worn, and is of poor fabric and appearance.

KARDAMYLE¹⁷

The acropolis hill of Kardamyle (PLATE 47 *b*, and FIG. 3) lies about 1 kilometre to the north of the modern village of Kardamyle, and 1½ kilometres from the sea. The summit rises to an impressive height, about 100 metres above sea-level, and measures about 300 metres from east to west by 200 metres from north to south. It is surrounded on all sides except the east by high and precipitous limestone cliffs, which are the result of earthquakes. On the east the hill is joined by a ridge to higher ground, on which is the hamlet of Ayia Sophia, about 500 metres distant, from which a track leads to the upper villages on the west slopes of Taygetus.

On the hill I picked up several sherds of Mycenaean pottery (L.H. III), and classical, Hellenistic, and Roman sherds. The extant remains of ancient walling on the south-east side, below the mediaeval (? Venetian) superstructure, are probably of classical or Hellenistic date; and the piece of wall photographed by Valmin¹⁸ is surely Hellenic. Not all the large rock cuttings on the extensive west slopes of the hill can be explained as quarries, as one at least has been cut to provide the wall of a living-room (measuring about 5.0 m. by 3.0 m.), since square shafts have been cut in the rock to house the ends of thick upright beams (PLATE 48 *a*).

The harbour at Kardamyle is one of the best on the west coast of the Mani, and this may be one of the reasons why the town of Kardamyle was moved down to the coast before or during the Roman period. To the north of the acropolis is a broad dry river bed, and in the rocky ground to the north of it, which slopes from east to west down to the sea, are square cuttings in the rock, about 0.20 metre wide, possibly for holding wooden water channels, leading from the

¹⁴ At Knossos, Evans, 'The Prehistoric Tombs of Knossos' (*Archaeologia* lix) 35, fig. 327; *BSA* xlvii (1952) 247, fig. 4; at Mycenae, *AE* 1888, 157, fig. 12; *AE* 1891, 1-11, pl. 1. Possibly the cuttings were made to house wooden doorposts; or they may have been intended simply to serve as a foil to the decoration of the *parastades*.

¹⁵ Wace and Thompson, *Prehistoric Thessaly* (1912) 23 and 164, fig. 111 (*f*).

¹⁶ Holmberg, *Asea* (1944) 122, and n. 1.

¹⁷ Forster 163; Valmin 199-202.

¹⁸ *Op. cit.* 202, fig. 41.

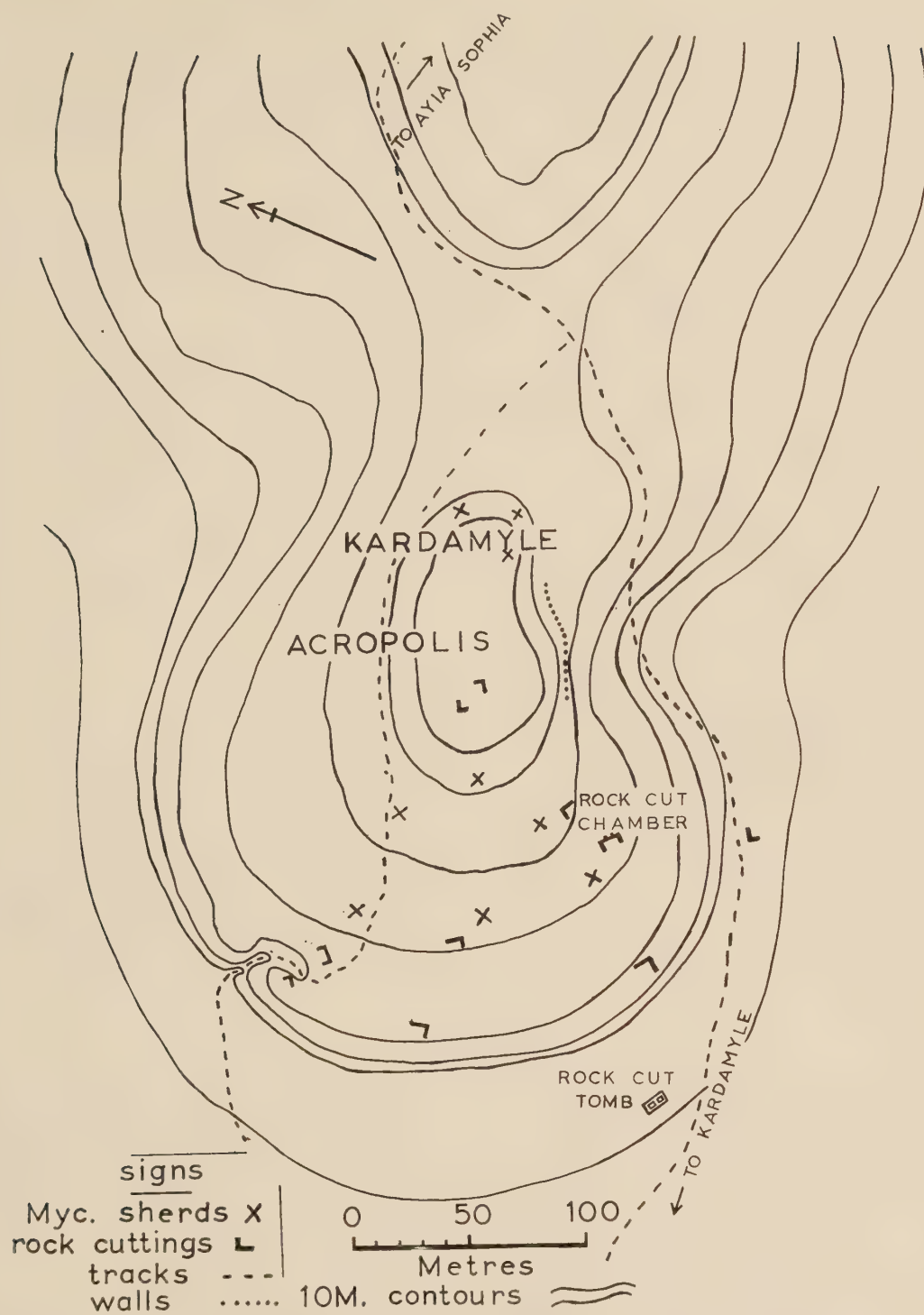


FIG. 3. KARDAMYLE

direction of Taygetus to the lower town by the shore.¹⁹ At one point there is a junction where the water would have been divided into two channels leading to the northern and southern parts of the lower town. The system can be traced for at least 1 kilometre to the east of this point and my guide, Mr. Frank Prokoreas (who appears in the photograph, PLATE 48 c), assured me that he had traced it even farther up towards Taygetus, but he had been unable to find the source of the water supply.

About 200 metres to the south-west of the acropolis, on the right of the track up from modern Kardamyle, is the 'Tomb of the Dioscuri', which was first discovered by Forster,²⁰ consisting of two rock-cut chambers (PLATE 48 b), each containing a grave 2.25 m. long by 0.60 m. wide. There is another similar tomb about 150 metres to the east, farther up the track and to the left of it, immediately below the cliffs of the acropolis.

Above the acropolis, to the east, near the hamlet of Ayia Sophia, is an extensive ancient quarry; and about 1½ kilometres farther east, on the right of the track leading to the upland villages of Chora, is a cemetery with rock-cut tombs similar in style to the 'Tomb of the Dioscuri'. One has three burial niches, each 1.30 m. by 0.70 m. (PLATE 48 c). The track to Chora runs over firm limestone rock, and is probably ancient. It is known that an ancient route existed across Taygetus from Kardamyle on the west to Xerokambi on the east, with which the settlement at Arkines was connected.²¹ Valmin found traces of a carriage road to the north of the 'lower town' of Kardamyle, which he connected with the ancient bridge near Xerokambi.²² One of the present-day processional routes up to Ayios Elias, the summit of Taygetus, goes up the gorge to the north of Kardamyle acropolis.

Finds from Kardamyle

At Kalamata Museum is a celt which is said to have come from a field near Kardamyle acropolis (the label reads Παλαιὰ Δεξαμένη, and the name of the owner of the field Στέφανος Μαυρογιαννέας). The celt (PLATE 50 d, a) is of Wace and Thompson type A,²³ and is of light-brown stone with a light-green core where chipped (length 0.117 m., width 0.06 m.). It is finely made and well polished.

Another similar celt (PLATE 50 d, b) may have come from Kardamyle, but the original label has been lost. This is smaller (length 0.054 m., width 0.039 m.), and is of light-green stone with black flecks, and well polished. The butt has been damaged, apparently by hammering.

Both these celts are probably to be dated either to the Neolithic or to the Early Helladic Period.

Mycenaean sherds found on the acropolis

Plain kylikes: four fragments from stems or bowls.

Deep bowls: four fragments from handles, all painted with dull black paint in monochrome inside and out.

Deep bowl or kylix: three certain and ten probable fragments, mostly monochrome painted. One sherd, from a kylix, has a thin horizontal band of lustrous orange paint outside, and monochrome orange paint inside. It is clearly of the L.H. IIIB period. The other certain fragments are all of the L.H. III period. The sherds are mostly buff in colour, and the fabric is 'soapy'.

KAMBOS

The Mycenaean tholos tomb at Kambos (PLATE 48 d) excavated by Tsountas in 1891²⁴ is one of the finest of those outside the Argolid, and resembles in its construction the Panagia tomb at Mycenae.²⁵ It is built of large blocks, mostly homogeneous in size, of a stone similar to the poros used at Mycenae. The masonry is fairly well coursed and dressed, although the best work

¹⁹ The lower town is described by Valmin and Forster locc. cit.

²⁰ Op. cit. 163.

²¹ BSA xvi (1909-10) 66. About 3 kilometres to the north of Xerokambi, immediately to the south of the junction formed by the main road from Sparta to Gytheum and the branch road to Xerokambi, is the chapel of Ayios Vasilios, which is the centre of a large L.H. III settlement, so that we

now have both a western and an eastern terminus for the Mycenaean route across Taygetus.

²² Op. cit. 201.

²³ Wace and Thompson, op. cit. 23.

²⁴ AE 1891, 189-91.

²⁵ BSA xxv. 316-20, figs. 59 and 60. Wace, *Mycenae*, index s.v. 'tholos tomb, Panagia tomb'.

SKETCH MAP OF THE KAMBOS DISTRICT

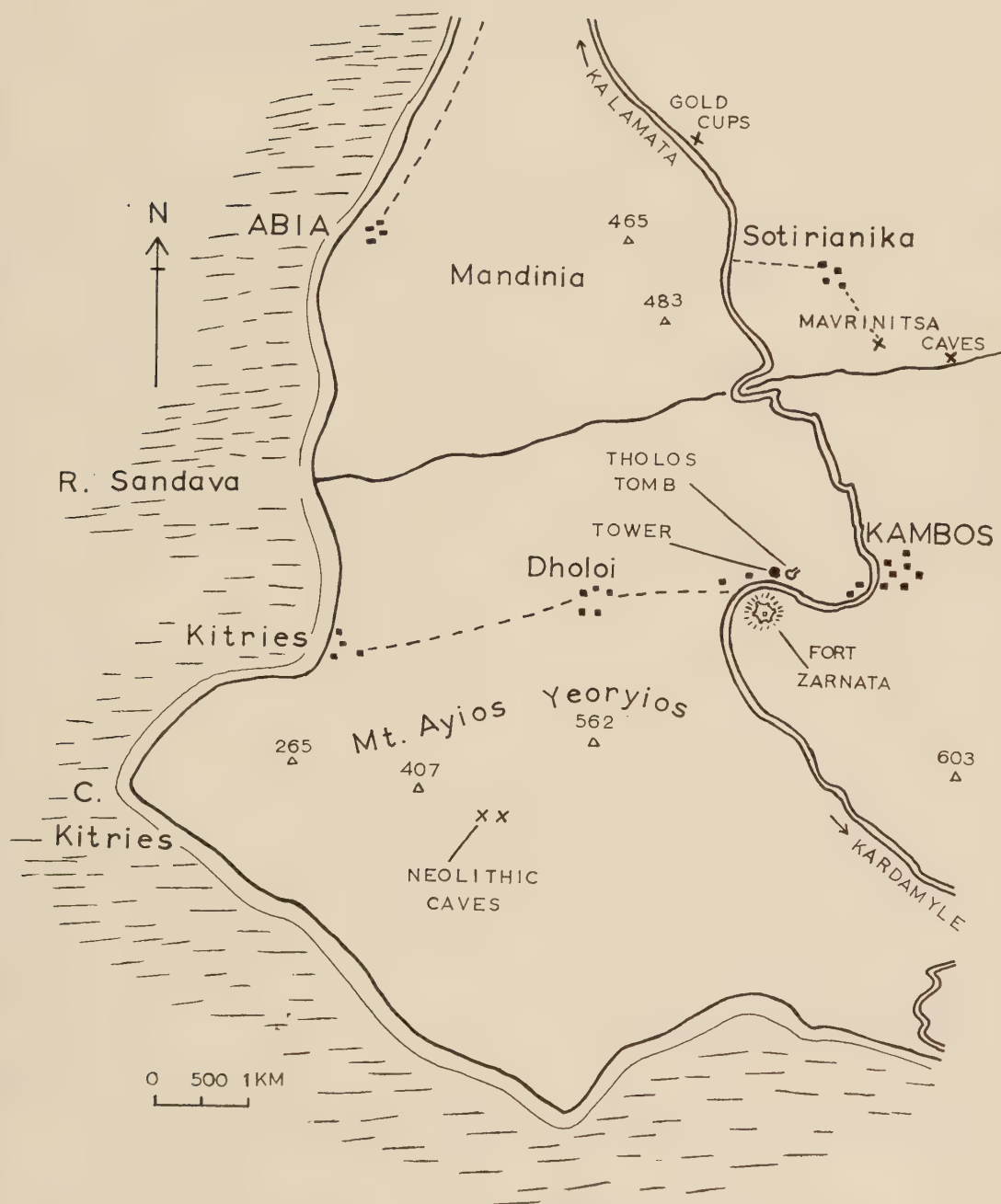


FIG. 4. KAMBOS DISTRICT

is in the sides of the doorway. The dromos, which faces east-north-east, was, when found, 12.85 m. long by 2.18 m. wide, and it was lined with rough stones set in clay. The façade is 2.65 m. high, and narrows slightly from the bottom upwards. The doorway, which is about 1.65 m. wide at the bottom, 1.50 m. at the top, and 3.60 m. deep, is roofed with three large lintels, of which the inner is the largest, being cut on a curve to fit the tholos. The doorway clearly once had a relieving triangle. The floor of the chamber is now covered to an unknown depth by soil and stones, but the diameter of the tholos must be upwards of 8.50 m., and the original height may be estimated at about 9.0 m. or more.

The tomb had clearly been robbed in antiquity and contained very little when excavated. The finds are in the National Museum at Athens (nos. 3301-11). The most important are the two lead statuettes described by Tsountas,²⁶ both of which are of the Cretan type. The male figure is 0.12 m. high and wears the Minoan peaked cap and loin-cloth. It was compared by Tsountas²⁷ and Stais²⁸ with the figures on the Vaphio cups. The stylized head-dress and cod-piece recall Cretan examples of M.M. III-L.M. II date.²⁹ The position of the hands suggests that he is holding a rhyton. The features are extremely well modelled and the muscles are clearly shown on the chest, arms, and legs. The female figure is smaller (0.085 m. high) and is also dressed in Minoan costume, the tight bodice and wide skirt; but it is not of such good workmanship as the male figure. If she originally held snakes in her hands, as Stais conjectured,³⁰ it is possible that the two figures formed a group of the type of 'Goddess with male worshipper'. It is quite likely that the two statuettes were actual Cretan imports.

The other objects found in the tomb were: an agate seal with a design of two Cretan wild goats, the holes for threading the seal being edged with granulated gold-work;³¹ seven flat beads from a gold necklace, with lily or ivy pattern; many scraps of gold leaf; a bronze ear scoop; twenty blue glass-paste ornaments; forty buttons of blue steatite; fragments of ivory; fragments of gold wire; and animal teeth.

It is probable that the two statuettes and the sealstone should be dated not later than the L.H. II period, whereas the buttons and glass-paste ornaments in such number are more likely to belong to L.H. III. The tomb was probably in use over a considerable time during the Mycenaean Period.

The tholos was built in the side of a low hill, which is now crowned by a small mediaeval tower named Γαβελία, about 1 kilometre to the west of the centre of Kambos village, and about 100 metres to the right of the road to Kardamyle. To the south-west, about 250 metres distant, rises the imposing hill of Zarnata, which dominates the fertile upland plain of Kambos. On the hill are the remains of a Venetian fortress,³² whose walls nearly all rest on more ancient foundations.³³ Kougeas³⁴ claimed to have discovered the remains of 'Cyclopean' walls below the east and south-east sides, but it is clear that these foundations are not earlier than the classical period. Zarnata is, however, because of its position and its proximity to the tholos tomb, the obvious site for the settlement which must have existed near the tomb, and a search of the Kambos plain has revealed no other alternative situation. Potsherds of the classical and Hellenistic Period are common on the hill, but no Mycenaean remains have yet been found there.

²⁶ Loc. cit. and Tsountas and Manatt, *The Mycenaean Age* 229-30, pl. 17.

²⁷ Loc. cit.

²⁸ *Collection mycénienne du Musée National* (1915) 157-9. The male figure is also illustrated by Bossert, *Alakreta* (1923) 30 and pls. 250-1. He dates it L.M. II.

²⁹ Bossert, op. cit. pls. 87-93, the 'Boxer' rhyton (M.M. III-L.M. I); pls. 94-97, the 'Harvesters' vase; pl. 139 (L.M. II); pl. 141a (? L.M. II). There seems to be no good reason for Bossert's conjecture that the figurine is L.M. III.

The above examples and some others are illustrated by Zervos, *L'Art de la Crète* (1956), pls. 394-5, 457, 496-7, 500-3, 534-7, 544-7, 552-5. Contrast the L.M. III loin-cloth in pls. 751-2.

³⁰ Loc. cit.

³¹ Cf. Blegen, *Prosymna* frontispiece and p. 270.

³² Kevin Andrews, *Castles of the Morea* (1953) 24-27.

³³ Valmin 182-6.

³⁴ *Ελληνικά* 1933, 261-324.

Kougeas and Valmin both identify Zarnata with the classical town of Gerenia³⁵ described by Pausanias;³⁶ and Kougeas further identifies the sanctuary of Claea with the caves called Κότουλας, where he found Neolithic pottery (FIG. 4, marked 'Neolithic Caves'), and the mountain Kalathion with that of Ἁγίος Γεώργιος. If these identifications are sound (and there seems to be no other place with as good a claim to be the site of Gerenia), the fact that Pausanias says³⁷ that Gerenia was called Ἐνόπη in Homer's poem is further support for the conjecture that the Mycenaean city, as well as the classical, was situated on the hill of Zarnata.

SOTIRIANIKA

In 1938 the 'Messenger d'Athènes'³⁸ reported the discovery 'south of Kalamata' of three gold cups and other gold objects by some peasants, who had taken them to a local goldsmith. He had unfortunately had time to melt some of them down before the news came to the ears of archaeologists.³⁹ The remaining objects were taken to the National Museum at Athens, where they are still awaiting publication. A second paragraph in a later number of the Messenger mentioned that the site had been further explored and more objects found.⁴⁰

I was taken to the exact place where the cups were discovered, by two guides independently, and their information is further confirmed by a footnote in a pamphlet written in 1956 by a local antiquarian.⁴¹ The site is on the immediate left of the road from Kalamata to Kambos, near the eleventh kilometre stone from Kalamata. The story is that the discovery was made by men who were clearing stones from the fields beside the road, or alternatively, that the 'tomb' was disturbed by the building of a lime-kiln.⁴² The place is about 3 kilometres from the upper turning from the main road to Abia, and about 1 kilometre to the north of the turning to Sotirianika (FIG. 4), near a disused lime-kiln, a few paces from the road. In view of this evidence, the local rumours that the cups came from Mavrinita (or 'Marvinita'), a ruined Byzantine monastery near Sotirianika, may safely be discounted.⁴³

Since the district where the gold cups were found is rocky and not very fertile, and as there are no traces of Mycenaean occupation near Sotirianika, it seems likely that the cups were looted from another district, perhaps from near Abia or even from Kambos, and were hidden in a rock cleft. One of my guides stated quite definitely that no tomb had been found with the cups.

The gold cups have been dated to the L.H. I period,⁴⁴ and their shapes have M.H. antecedents in clay.⁴⁵ The largest cup weighs 337½ grammes, and is fairly well preserved. It is very like a gold cup from the Fourth Shaft Grave (Old Grave Circle) at Mycenae.⁴⁶ The other cups are both smaller, weighing 65½ and 55½ grammes. They are badly crushed, but appear to have been of approximately the same shape as the larger one. Besides these there were some thin patterned fragments, probably from other cups. It has not been possible to verify the account of additional finds of a gold 'diadem' (presumably a Mycenaean head-band of the usual form)

³⁵ Kougeas, *op. cit.* 264. Valmin, *loc. cit.*

³⁶ Paus. iii. 26, 8–11. ³⁷ iii. 26, 8.

³⁸ Jan. 16th, 1938.

³⁹ *AJA* xlii (1938) 304–5.

⁴⁰ Jan. 19th, 1938.

⁴¹ G. Anapliotes, 'Ἱρή—Ἀβία—Παληοχώρα' (Ἐκδοσις Συλλόγου πρὸς διάδοσιν τῶν γραμμάτων, Kalamata, 1956). The pamphlet is available at the Gennadeion Library, Athens. The cups are described on p. 9, n. 1.

⁴² *Loc. cit.*

⁴³ Mavrinita lies about 1½ kilometres to the south of Sotirianika and 500 metres to the north of the Sandava

gorge. At the time of the Venetian invasion the Greeks at the monastery were forced to take refuge in a high, inaccessible, and rocky hill, high above the monastery, about 300 metres to the south-east of it, and in fortified caves on the north side of the precipitous Sandava gorge. The story is that they left quantities of gold behind at Mavrinita, 'where it lies to this day'. Gold is also said to lie hidden at a place called Chrysovritsa, to the north of Sotirianika, in a barren and rocky district.

⁴⁴ *AJA* *loc. cit.*

⁴⁵ Goldman, *Eutresis* pl. 15, 1.

⁴⁶ Georg Karo, *Schachtgräber von Mykenai* 103, and pl. 108.

and a gold plate.⁴⁷ There are also rumours that a gold sword-hilt and a small gold statuette were found, and in view of the fact that three gold ingots were found with the cups when they were 'seized by the authorities' in 1938, these rumours may contain an element of truth.

The gold cups are of an importance second only to that of the finds from the Kambos tholos tomb, and they are the earliest Mycenaean finds recorded in the district. Their discovery emphasizes the problem of the date of the first Mycenaean settlement of the area round the Messenian Gulf, and of the status of the Seven Cities. It is to be hoped that a full publication of the finds may shortly become possible.

CAVES NEAR PEGADHIA

I was guided by Mr. Theodoros Pavles of Sotirianika to a site discovered by him at Κοκκινόχωμα Πηγαδίων, which lies a half hour to the west of the village of Pegadhia, and about 2 hours to the east of Sotirianika. The track from Sotirianika leads up a steep hillside for $1\frac{1}{2}$ hours, after which there is a gradual descent on the east side towards Pegadhia. Half an hour after the track has begun to descend, large limestone outcrops begin to appear, with shapes which are reminiscent of Alpine scenery. At a place where the track executes a double bend on a sharp descent, 50 metres to the right there is a small cave, hardly recognizable as such, since the rocks which once formed it have become dislodged. Here were found human bones together with some rough Bronze Age pottery (including a kylix foot, probably of early Mycenaean date) which has the appearance of being M.H. or early Mycenaean. The pottery is now in the Kalamata Museum. The importance of the find is that it shows the presence of Bronze Age people not only in the coastal regions, but also in upland valleys and plateaux. I was not able to find the settlement site, but it was presumably in the neighbourhood of Pegadhia. We may compare Arkines in Laconia, which is in a similar situation.⁴⁸

ABIA, PALAIOCHORA

The ancient Abia⁴⁹ has been identified with the site at Palaiochora, on the coast about 6 kilometres to the south of Kalamata.⁵⁰ Here there are remains from the classical and Roman periods, in the vicinity of the small Byzantine *kastro*. No Mycenaean finds have yet been discovered here, but the region is suitable for prehistoric occupation, since the soil is light, sandy, and easily cultivable. It is possible that there is a Mycenaean deposit concealed below the later remains on the hill of the *kastro* (a small, low, rocky promontory projecting a considerable distance into the sea), which, despite Forster's comment,⁵¹ is not unsuitable for a Mycenaean acropolis. A search of the country to the south of Palaiochora was not rewarded, and showed that the *kastro* site was the most likely place for the settlement in this area.

A Roman sarcophagus has recently been found a short distance to the east of the *kastro*; and about 100 metres to the east of the *kastro*, about 50 metres to the south of the church of the Κοίμησις Θεοτόκου, a wall of squared and sawn blocks has been discovered.⁵² About 200 metres to the north of the church, in the earth cliff to the east of the shore road to Kalamata, a deep deposit of black soil has been revealed by recent widening of the road. In the deposit were classical sherds of the period of the fifth to fourth centuries B.C. The district between Palaiochora and Almyros, which lies 2 kilometres or more to the north, appears to be too barren and rocky to be chosen as an area for prehistoric settlement.

⁴⁷ Anapliotes, loc. cit.

⁴⁸ *BSA* xvi (1909-10) 66.

⁴⁹ Paus. iv. 30, 1.

⁵⁰ Forster 164-5.

⁵¹ Loc. cit.: 'The remains of antiquity at Palaiochora are

inconsiderable.'

⁵² This is conjectured by Anapliotes, op. cit. 12, to be the site of the temple of Asclepius mentioned by Pausanias, loc. cit.

The coastal area between Almyros and Kalamata contains no suitable site for prehistoric occupation, and there are no traces of any ancient remains of a later date there.

GIANNITSA⁵³

The walling on the north side of the hill of Giannitsa (PLATE 50 c) is of polygonal masonry (hammer face),⁵⁴ and should therefore be dated to the classical period or later. I have found classical sherds and remains of house foundations on the north slope of the hill. It is likely that there was a small fort or walled village here in the classical period, guarding the west end of a route across Taygetus, since traces of an ancient (probably classical) carriage road have been found on the plateau of Tikli, to the east of Giannitsa.⁵⁵ I could find no Mycenaean remains at Giannitsa, and it seems unlikely that there was a prehistoric site here. There is, at any rate, no room for more than a very small settlement, and, as Frazer pointed out,⁵⁶ the small size of the hill (the summit of which measures only about 150 m. by 80 m.) precludes the identification of Giannitsa with the classical Pherai. Nor could Giannitsa be equated with 'Ipr̥, as Forster suggested,⁵⁷ although it is a reasonable supposition that it was the site of Strabo's Mesola.⁵⁸

KALAMATA⁵⁹

On the high sandy hill about 500 metres to the north-east of Kalamata castle, to the north of the road from Kalamata to Sparta (FIG. 5), I found a considerable quantity of Mycenaean sherds of L.H. III date, a few which are probably of Laconian Protogeometric, and some of classical black-glazed ware. The L.H. III sherds were all from the upper terraces of the hill, which is now wholly under cultivation. In three cases they occurred immediately below the remains of collapsed Mycenaean chamber tombs (FIG. 5), and there are two other (probable) collapsed tombs on the hill. I suspect there may be others still to be found, while more will have been destroyed by erosion or cultivation. The Mycenaean pottery was always found in compact groups, and not spread all over the hill, as would be the case on a settlement site. There were no sherds on the top of the hill, and the grouping of the pottery, together with the occurrence of at least three tombs, makes it certain that this hill was primarily a Mycenaean cemetery and not a habitation site. There were two other chambers cut in the soft sandstone rock near the top of the cliffs on the left of the Nedon gorge, a little farther to the north.

The only reasonable conclusion is that the Mycenaean settlement for which the tombs were constructed was on the hill of Kalamata castle itself. The hill site is ideal for a Mycenaean fortress, since the rock rises steeply about 60 metres above the river Nedon, and commands the whole of the Kalamata plain down to the sea. The hill has been continuously used from the classical period, when it was almost certainly an acropolis, up to modern times, and it was an important fortress in the medieval period.⁶⁰ I could find no Mycenaean sherds within the castle walls, but this is hardly surprising in view of the continuous habitation of the site. There were a few classical sherds there, and others on the steep north slope below the walls, and there are ancient column drums built into the north and south walls. The area enclosed by the fortifications is roughly 250 metres north to south by 120 metres east to west, so that there is ample space for the acropolis of a city of the size and importance of the Homeric Φηραί (PLATE 49 a).

⁵³ Forster 165-6.

⁵⁴ Scranton, *Greek Walls* (1941) 68-69.

⁵⁵ Pernice, *AM* xix (1894) 365-7. Cf. Valmin 49 ff. If this route led across Taygetus, as seems likely, it would presumably descend on the Laconian side in the region of Anavryte or Mistra (McDonald in *AJA* xlv (1942) 542).

⁵⁶ *Commentary on Pausanias* iii. 422-3.

⁵⁷ Loc. cit.

⁵⁸ Ibid.

⁵⁹ Strabo 360-1; Paus. iv. 30, 2; 31, 1; Frazer, loc. cit.; Forster 166; Skias, *AE* 1911, 108-10; Valmin, index s.v. 'Kalamai'.

⁶⁰ Kevin Andrews, op. cit. 28-35.

The classical city certainly appears to have spread a considerable distance to the south and east, at least as far as the large modern church of Ὑπαπαντή τοῦ Σωτήρος (FIG. 5), near which are the foundations of large enceinte walls, which appear to be ancient. About 150 metres east of the castle, and 100 metres to the south of the road to Sparta, in a track leading south from the road towards the modern city centre, are some ancient wheel ruts worn in the rock, and in a farmhouse courtyard nearby are two large limestone blocks, about 2.0 metres square, with remains of iron 'T' clamps at the corners. When the monastery of Ἅγιος Κωνσταντῖνος was built in 1952, classical tombs were found in the area, and there are remains of other tombs in the side of the road near the monastery. This shows that the classical cemetery was as far away as 500 metres from the castle hill; which gives us some indication of the size of the classical Pherae. Kalamata in the Middle Ages appears to have occupied roughly the same area, and it was also centred on the castle hill.⁶¹

Sherds from the Hill to North-East of Kalamata Castle

? Early Helladic

Base of deep bowl with conical hollowed stem (estimated diameter of base about 0.09 m.), hand-made, with flaking 'Urfirnis' paint.

Two sherds probably from E.H. sauceboats, one with 'Urfirnis' paint, the other of Zygouries class AII,⁶² with pink slip and marks of bone polishing. There were other hand-made fragments, including two bases of flat vertical handles, possibly from E.H. tankards.⁶³

Mycenaean (mostly L.H. III)

Kylix: four fragments, of hard reddish clay, two of which have traces of brown monochrome paint inside and out.

Low-stemmed bowls: two bases, of a hard red fabric.

Deep bowls: two flat bases, with monochrome paint inside and out (diams. c. 0.06 m.); two splaying rims, of fine buff fabric, with dark-brown monochrome paint inside and out,

smoothed; two fragments with linear bands of orange paint (L.H. IIIB).

Large bowl: five large handles, of hard reddish fabric and streaky brown paint. Several other fragments, mostly with streaky monochrome paint.

'Oatmeal Ware': several fragments of a pink 'oatmeal' ware, like that found on Mycenaean sites in Laconia and many examples on an excavation dump at Ano Englianos.

? Protogeometric

Two fragments, of thin buff clay, one with traces of compass-drawn circles, and the other with part of a lattice pattern, similar to that on Laconian Protogeometric from Amyklai, &c.⁶⁴ But I would hesitate to guarantee the date of these two sherds.

Three fragments of obsidian were also found on the hill.

The district between Kalamata and Thouria, especially to the north of Asprochoma, is suitable for prehistoric occupation, since the low sandy hills are easy to cultivate without the use of deep ploughing. A brief search of this area showed that there are ancient sherds here, but there were no indications of an important settlement.

THOURIA

The site of the classical Thouria (FIG. 6) lies about 3 kilometres to the north of the modern village of Thouria, about 1 kilometre to the east of the main road from Kalamata to Megalopolis. The classical remains⁶⁵ are to the north end of a long ridge (about 1½ kilometres north to south and only about 100 metres east to west), which overlooks the marshy plain 2 kilometres to the west. The site is known as Παλαιόκαστρο. About 500 metres south of the classical remains (FIG. 6), on the upper slopes of the ridge on the east side, there are at least eighteen Mycenaean chamber tombs cut in the soft sandstone rock. They were first recorded by Skias,⁶⁶ who recog-

⁶¹ If we may judge from a small bronze engraving in the René Paux collection at the museum in Pylos (Navarino). An enlargement of the engraving now hangs in Kalamata Museum, and it is also reproduced by Anapliotes, Στὰ χρόνια τῆς Κουγκεστᾶς ('Ἐκδοσις Συλλόγου πρὸς διάδοσιν τῶν γραμμάτων, Kalamata, 1953). This booklet is available at the Genna-

deion Library, Athens.

⁶² Blegen, *Zygouries* 78-83 ('yellow mottled ware').

⁶³ As Blegen, *Korakou* figs. 10-11.

⁶⁴ Desborough, *Protogeometric Pottery* pl. 38.

⁶⁵ Strabo, loc. cit.; Paus. iv. 31, 1-2; Frazer, op. cit. 424-7; Skias, op. cit. 117-18; Valmin 51-63. ⁶⁶ Loc. cit.

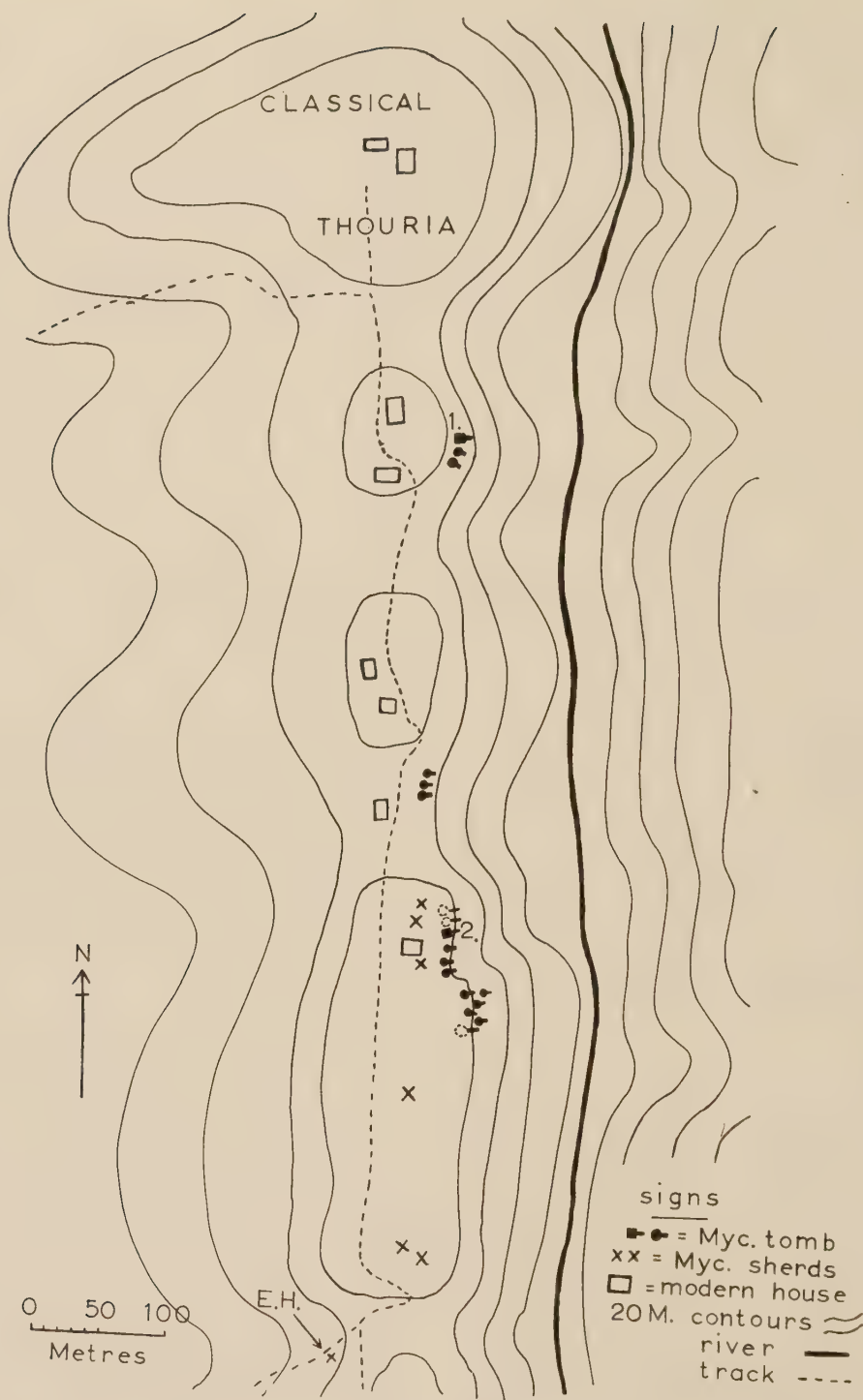


FIG. 6. THOURIA

nized their importance, but Valmin⁶⁷ does not seem to have been impressed by them. I was unable to rediscover the other two tombs which Skias found on the south-west side of the ridge,⁶⁸ but there were sherds in the area, as well as an E.H. 'figurine' (see below). Some Mycenaean pottery was found together with obsidian in a few places to the south end of the ridge (FIG. 6) above the level of the discovered tombs, and it is possible that this represents rubbish from a habitation site, and is not merely from plundered tombs. It is likely, however, that the main area of the Mycenaean settlement was not here but on the same hill as the classical remains, 500 metres to the north, a very good site for a Mycenaean acropolis. Because of the intensive classical occupation it proved impossible to find Mycenaean sherds here; but there is no other likely site for the centre of the large settlement which must have existed near the tombs. There are no traces of ancient occupation on the neighbouring hills to south and west of Παλαιόκαστρο, and it is unlikely that there would be a settlement to the east of the river gorge which lies below the ridge on its east side.

Two of the chamber tombs have been cleared out (FIG. 8a-b; b = PLATE 49 b), and could be measured. Both are well constructed and impressive in size. Three other tombs, of which the dromoi only are visible, are probably equally large, and may afford possibilities for excavation; but it is probable that most, if not all, of the tombs that are visible have been robbed, either in ancient times or following their discovery by Skias.

Objects found at Thouria

Early Helladic 'figurine' (PLATE 50 b)

At the point marked 'E.H.' on the plan (FIG. 6), a terracotta object was found, of the type that is conjectured to be a kind of stylized figurine of the late E.H. period.

Exactly similar objects have been found at Zygouries⁶⁹ and Lerna.⁷⁰ The figurine found at Thouria is 0.062 m. high (the top is broken off) and 0.051 m. wide. The 'arms' are set about 0.028 m. above the base.

L.H. III pottery from the hill above the chamber tombs

One fragment from a long-stemmed kylix, of buff clay.

Three fragments from plain kylikes.

Two bases of low-stemmed bowls, of soft pink clay.

Two 'horizontal' rims of deep bowls.

Three fragments from deep bowls, with horizontal bands of paint.

Several fragments from large deep bowls or kraters, one of which is painted.

Pottery from the classical site

Laconian Protogeometric

Two sherds from the rims of deep bowls.

Classical black-glazed

Several fragments from kylikes, kraters, &c. The impression is that most of the material is of the fifth century B.C.

Hellenistic and Roman pottery also occurred.

Obsidian

Five chips, all 'wasters', were found on the hill above the southernmost chamber tombs.

PIDIMA

On the ancient site near Pidima, about 3 kilometres to the north of the classical Thouria, Valmin apparently found some Mycenaean sherds,⁷¹ but there is hardly space here for a large settlement, and the area of the ancient site was found to be only about 200 by 55 metres.⁷² The conjecture that Pidima is the site of the ancient Kalamai⁷³ seems reasonable.

⁶⁷ Op. cit. 59-60.

⁶⁸ Skias, op. cit. 118.

⁶⁹ Blegen, *Zygouries* fig. 177.

⁷⁰ *Hesperia* xxv (1956) 162, and pl. 47 j-k.

⁷¹ Loc. cit. The French is ambiguous ('une quantité de débris de vases de toutes les époques depuis l'époque

mycénienne'), but Nilsson, *The Mycenaean Origin of Greek Mythology* (1932) 80, says that a few Mycenaean sherds were found at Pidima, and these were presumably the ones found by Valmin.

⁷² Valmin, loc. cit.

⁷³ Loc. cit.

SAMARINA

Valmin reported that in the neighbourhood of the Byzantine church of Samarina tombs with Mycenaean vases had been found.⁷⁴ But I could find no Mycenaean site in the vicinity, and the district seemed to be unsuited for a prehistoric settlement. I was told quite definitely by the people who own the land round the church that no Mycenaean tombs had ever been found in the locality, although they pointed out many tombs of medieval date on the hill to the south of the church. I could not find a single sherd of classical pottery, let alone Mycenaean, in the district, and I suspect that the 'quantité de débris de vases anciens' recorded by Valmin may all be explained by the medieval occupation of the site, when it was a monastery of some importance.⁷⁵ Valmin noted that the remains of ancient blocks built into the church were of many periods. In this connexion it may be noted that a very convenient quarry for the construction of the Byzantine church lies only 3 kilometres away, at a higher elevation, and clearly visible—namely, the site of the ancient ruins at Mavromati-Messene. Without excavation it cannot now be determined whether the 'ancient building', on the foundations of which the church is said to rest, is of ancient Greek or merely Byzantine origin. At any rate, I would have some hesitation, on the present evidence, in classing Samarina as a Mycenaean or classical site, even a minor site.

KARTEROLI

The Mycenaean site at Karteroli⁷⁶ lies on low sandy hillocks on the western border of the Messenian plain, between the village of Karteroli on the west and the hamlet of Piperitsa on the east, and about 500 metres distant from both (FIG. 7). The main road from Messene to Mavromati passes between the area of the Mycenaean settlement on the east and the low hill, into the sides of which the Mycenaean chamber tombs have been dug, on the west. There are three certain Mycenaean tombs (two of which are illustrated on FIG. 8 c (= PLATE 49 c) and d, and four probable tombs now visible; and I suspect the presence of others (some of which are marked on a '?' on FIG. 7). It cannot now be determined how many of the war-time gun emplacements and hideouts on the hill were built by enlarging or destroying chamber tombs, but the irregular and unmilitary shape of four of these is suggestive.

Two of the tombs are said to have had rich contents,⁷⁷ and the tombs here illustrated are of large size. The third certain tomb is marked only by its dromos, visible for a length of about 5.0 metres. It is slightly more than 1.0 metre wide, and inclines inwards slightly at the top.

The area over which Mycenaean sherds were found is not large (about 100 metres by 150 metres), but there are indications that the settlement extended to all the hillocks to the east of the road, including that on which the village of Piperitsa is built, and it seems probable that it spread up to the margin of the plain.

Mycenaean pottery from Karteroli

Five fragments from kylikes.

Nine fragments from deep bowls or kylikes, all with

monochrome orange or black paint inside and out; L.H. III.

Several bases and handles of large coarse ware vessels, some of which bear traces of paint.

⁷⁴ Op. cit. 63. Nilsson, op. cit. 80, says that a few Mycenaean sherds were found here, but he may be extrapolating from Valmin's account.

⁷⁵ An account is given by Oikonomakis, *Τὰ σωζόμενα ἱθώμης Μεσσήνης καὶ τῶν περὶ* (Kalamata, 1879) 51 (available at the Gennadeion Library, Athens): ὁ ναὸς οὗτος ὁ καλούμενος κοινῶς μὲν "Σαμαρίνα" (αὕτη ἴσως δηλοῖ

τὸ ὄνομα τῆς Αὐτοκρατείας ἣτις ἔκτισεν αὐτὸν καλουμένη ἴσως "Σάντα Μαρίνα", καὶ κατ' ἀποκοπὴν τοῦ τὰ "Σαμαρίνα") Χριστιανικῶς δὲ "Ζωοδόχος Πηγὴ" ἦτο μονή, κτισθεῖσα, ὡς σώζεται παράδοσις, ὑπὸ τῆς συζύγου τοῦ Ἀνδρονίκου Αὐτοκράτορος, τοῦ Παλαιολόγου.

⁷⁶ Valmin 64.

⁷⁷ Loc. cit.

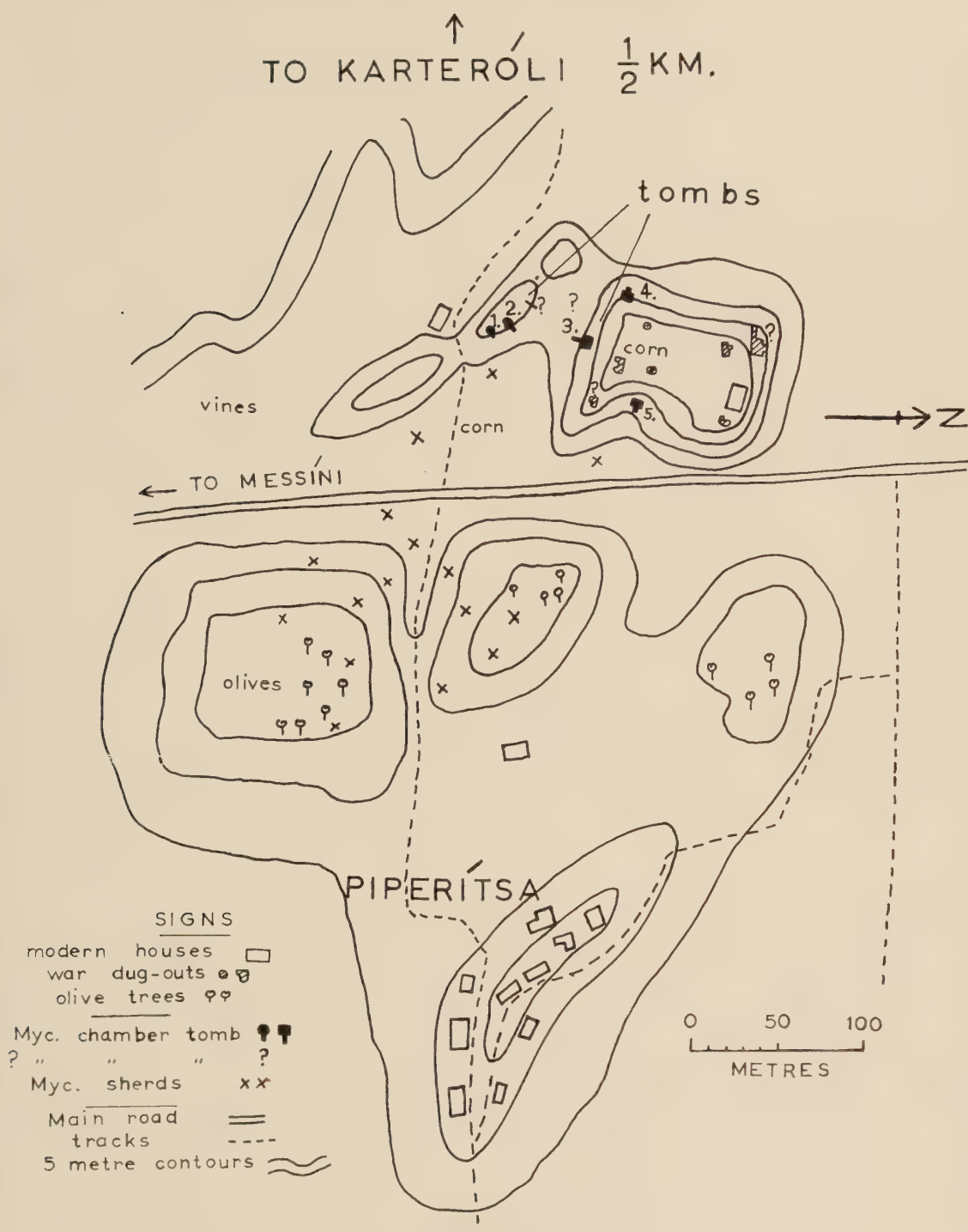
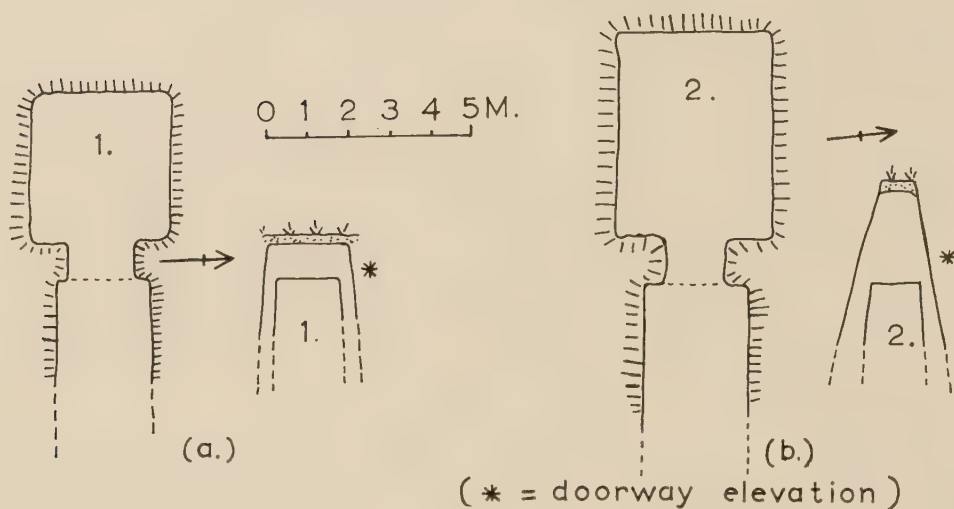


FIG. 7. KARTEROLI

SKETCH PLANS OF MYCENAEAN CHAMBER TOMBS

THOURIA



KARTERÓLI

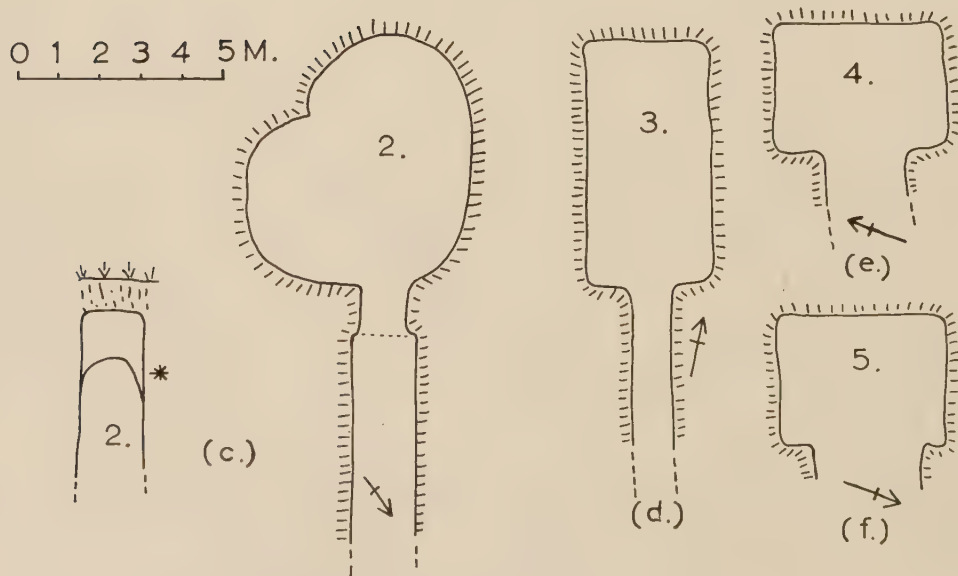


FIG. 8. MYCENAEAN CHAMBER TOMBS: a-b, THOURIA; c-f, KARTEROLI

RIZOMYLO (FIG. 9)

For 3 kilometres to the west of Messene the road to Pylos passes through country which has the appearance of having been wooded in antiquity. But about 500 metres to the south-east of the hamlet of Rizomylo, where the road from Messene divides into a left fork to Petalidhi (about 5 kilometres away) and a right fork to Pylos, the country becomes more open, and there are a series of small low hills and valleys descending to the sea. A stream runs through Rizomylo, and another, larger stream past the village of Velika about 600 metres to the east.

Remains dating from the Roman Period were found on the right bank of the stream which runs through Rizomylo, and on the lower slopes of the high ground isolated between the two streams. On the left bank house walls of stone, tile, and cement are visible, and column-bases of the Corinthian or Ionic order can be seen also. Tombs are said to have been found on the hills to the west opposite (FIG. 9), built of stone slabs and tiles, and sherds in some quantity were found here over an extent of about 150 metres, but they are all apparently Roman. A Mycenaean settlement seems unlikely here, but the possibility of one on the ridges to the west opposite cannot be excluded. These, in contrast to the site, have the light sandy soil characteristic of many Mycenaean sites (e.g. Thouria and Karteroli). The river which runs past Velika may be the ancient river Bias, which, according to the distances indicated by Pausanias,⁷⁸ should be placed in this region.

PETALIDHI-KORONE (FIG. 10)

Classical remains have been found on the acropolis at Petalidhi (the ancient Korone),⁷⁹ but, although the site is naturally suitable for a Mycenaean settlement, no pre-classical finds have been made there.⁸⁰ It seems possible that Korone, despite the evidence from Strabo and Pausanias (see below), was a later foundation, like Asine.

On the north-east of the acropolis, not far from the school (at the point marked '1.' on the plan, FIG. 10), I found five Doric capitals within a levelled area which may be the site of a small temple. These remains have apparently not been previously recorded. The capitals are of grey limestone and appear to be of early classical date.

KORONE-ASINE

The earliest find recorded from Korone (the ancient Asine)⁸¹ was a sherd of Protocorinthian ware. Pausanias says that the city was founded by colonists from Asine in the Argolid, who fled to Messenia when their city was sacked by the Argives. A rough date for this event would be towards the middle of the eighth century B.C., in the reign of Nicander, which falls about a generation before the First Messenian War, if we are to accept Pausanias' version.⁸² I was unable to find any Mycenaean or other pre-classical remains in the area of the classical city.

It is difficult to believe that the whole of the reasonably fertile district on this west coast of the Messenian Gulf, from Petalidhi-Korone to Cape Akritas, is devoid of Mycenaean remains, but it appears that there was no major Mycenaean city here (with the possible exception of Peta-

⁷⁸ Paus. iv. 34, 4; Valmin 179.

⁷⁹ Tod, *JHS* xxv (1905) 40-41; Valmin 154.

⁸⁰ Valmin 178.

⁸¹ Valmin 163-8; Frödin and Persson, *Asine* 15-17. On general topographical grounds it is clear that the identi-

fication of the Messenian city of Asine with the modern Korone is probably correct, despite the doubts raised by Valmin in *Bull. Lund* 1934-5, 44-46.

⁸² Paus. ii. 36, 4; iii. 7, 4; iv. 34, 9-12; Strabo 372-3.



FIG. 9. RIZOMYLO AND VELIKA

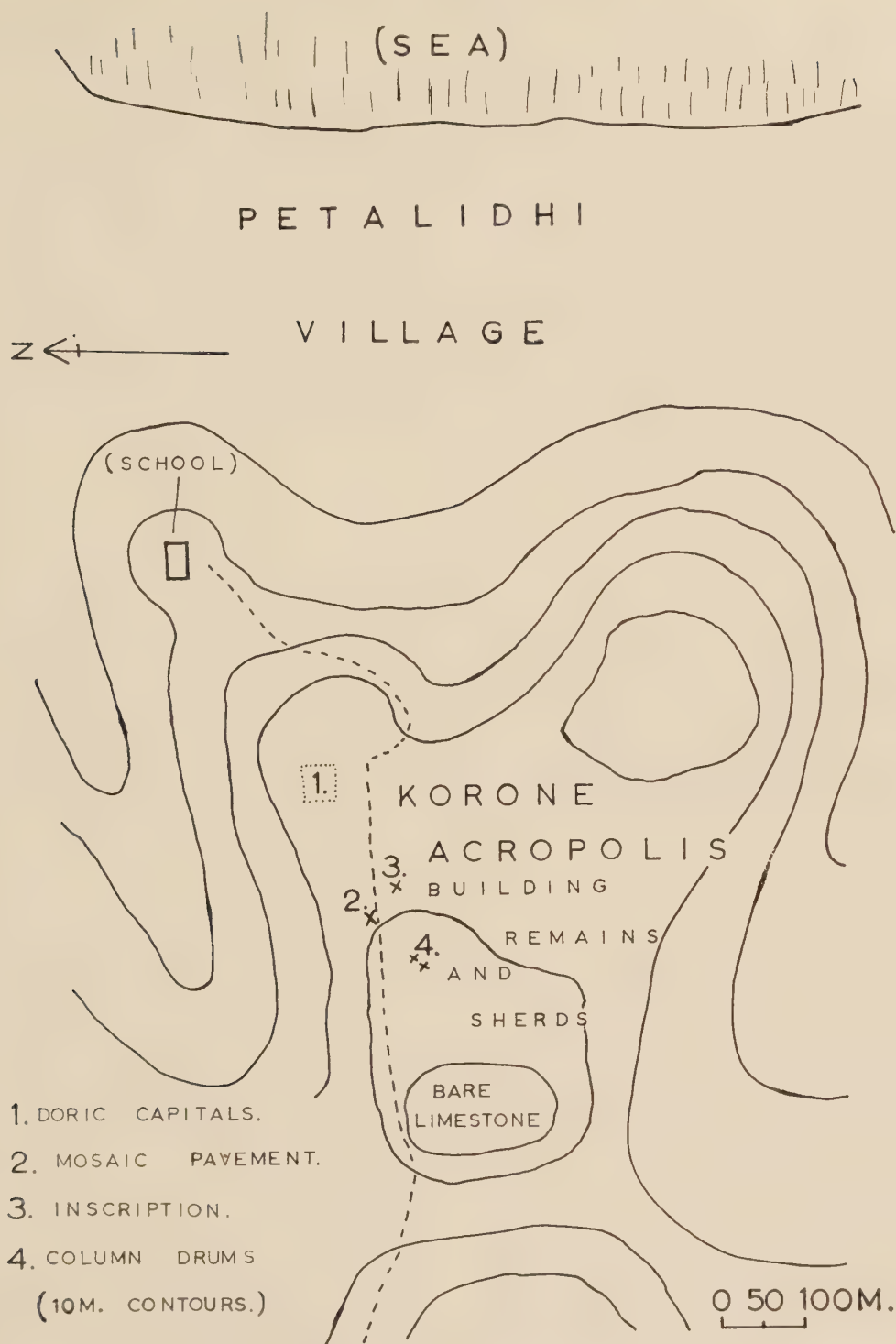


FIG. 10. PETALIDHI AND KORONE

lidhi); although I suspect that a more thorough survey would give the locations of some minor sites.

METHONE

The site of 'Old Methone',⁸³ where Valmin found some Mycenaean sherds, seems too insignificant to have been the centre of a city of importance. I was unable to find a single Mycenaean sherd there. It is likely, however, that the main Mycenaean site was where the Venetian castle now stands (Valmin found a Mycenaean steatite button there).⁸⁴ Within the castle walls I found several fragments of black-glazed classical pottery, and the walls contain several well-squared and sawn blocks which are obviously of ancient date. As regards the argument of Valmin⁸⁵ that the Mycenaean town could not have been situated as close to the sea as the modern fortress, we have only to consider the positions of Korakou in Corinthia, Asine in the Argolid, and Epidauros Limera in Laconia⁸⁶ to see that the conclusion is invalid. A Mycenaean fortress on the castle hill would dominate the fertile Methone plain and the harbour (which would have been well suited to the beaching of ancient ships).

THE PROBLEM OF THE IDENTIFICATION OF THE SEVEN CITIES

Καρδαμύλη

Strabo and Pausanias both agree as to the position of Καρδαμύλη, although Strabo places it on the coast. There can be little doubt that the Mycenaean city was on the site of the acropolis, and the original name has been preserved throughout later Greek history (it survived during the Turkish occupation, in the form 'Skardamula'). By Strabo's day the town must presumably have spread down to the shore, where late remains have been found.⁸⁷ Pausanias' distance of 8 stades from the shore agrees approximately with the present distance of the acropolis from the sea. The interval of 60 stades from Leuktra to Kardamyle is twice as long as the actual distance, but Pausanias often overestimates the distances in this district, especially when judging them by time.⁸⁸

Ἐνόπη

Strabo gives three alternative positions for the site of Ἐνόπη. The first, Pellana, seems to be an unlikely candidate.⁸⁹ The others are 'a place near Kardamyle' (whose position can never be known) and 'Gerenia'. Pausanias places Ἐνόπη at Gerenia, and this identification and the location of Ἐνόπη (= Gerenia) at Kambos is supported by the presence of the Mycenaean tholos tomb there, the existence of which may have given rise to the ancient tradition of the tomb of Machaon, son of Asclepius, which is recorded by Pausanias as being at Gerenia. It is reasonably certain that the 'sanctuary of Claea with a cave close beside', the mountain Kalathion, and the town of Alagonia have been correctly located in the Kambos district.⁹⁰

⁸³ Tod, *op. cit.* 34; Valmin 154.

⁸⁴ *Op. cit.* 153.

⁸⁵ *Op. cit.* 154.

⁸⁶ Several Mycenaean chamber tombs have been excavated to the south of the acropolis at Epidauros Limera by Christou (*AJA* lix (1955) 226; and *Τὸ ἔργον τῆς Ἀρχαιολογικῆς Ἑταιρείας κατὰ τὸ 1956*, 96-100). I take this opportunity of recording that I have found sherds of L.H. III kylikes and chips of obsidian on the upper slopes of the

acropolis.

⁸⁷ Forster 163. Valmin 199-201.

⁸⁸ Frazer, *op. cit.* 402. Many of the errors seem to result from travelling by sea, as Pausanias must have done for the greater part of his travels up the west coast of the Mani.

⁸⁹ Valmin 207: 'Pellana a été située loin dans le Taygète et semble moins probable, parce qu'on ne pourrait pas en dire qu'elle était située "près de la mer".'

⁹⁰ By Kougeas and Valmin (see n. 35 above).

Ἰρή

This city cannot be located, although its general position is fairly certain. Strabo names two alternative locations, one at Oechalia, near the frontier between Messenia and Arcadia,⁹¹ which can hardly be right, and the other 'at the place now called Mesola, in the gulf between Taygetus and Messenia'. Pausanias places Ἰρή at Abia.⁹² The light sandy soil in the region of Abia (Palaiochora) seems to be suitable for a prehistoric settlement (see above, and compare the soil conditions at Kalamata, Thouria, and Karteroli, and the Mycenaean sites recently discovered in the Pylos area), but none has yet been located. Forster suggested⁹³ that both the Homeric Ἰρή and Strabo's Mesola are to be located at Giannitsa, but the hill is too small to have ever been the site of a city of importance, even if Mycenaean remains were to be found there in the future. On the whole it is more likely that Ἰρή should be looked for in the region of Abia or Mandinia, or at any rate somewhere near the shore between Abia and Kitries. There is also the possibility that there are Mycenaean remains on the *kastro* hill at Palaiochora, concealed below the level of the Roman and Byzantine remains, and the rock would be a good site for a Mycenaean acropolis.

Φηραί

The discovery of Mycenaean tombs and pottery near the castle of Kalamata greatly strengthens the argument for the location of the Homeric Φηραί at Kalamata, especially since this identification agrees with the accounts of both Strabo and Pausanias.⁹⁴ Strabo gives the distance from the classical Pherae to the sea as 5 stades, and Pausanias as 6 stades. The present centre of the modern Kalamata lies about 2 kilometres inland, and the castle about 2½ kilometres inland. The difference between the ancient and the modern distances may probably be explained by the fact of the alluvial deposits left by the river Nedon and other streams since classical times. There are similar deposits elsewhere at the head of the Messenian Gulf (see p. 256 below). It is possible that the difference of a stade between the estimates of Strabo and Pausanias represents the amount of the accretion of the land between their lifetimes. Strabo mentions that Pherae was near the mouth of the Nedon, 'which flows through Laconia'.

The strategic position of the fortress site at Kalamata, which commands the seaward end of the Messenian plain and the main east-west route from Laconia to Messenia (whether this was via the Langadha gorge or by the Giannitsa route) makes it certain that it was an important site in the Mycenaean Period as in later times. Forster⁹⁵ rightly rejects the identification of Pherae with Giannitsa, since Giannitsa lies 4 kilometres from the sea. The superstition that the sea could have been nearer to the mountains in ancient times by a sufficient distance to explain the discrepancy between the words of Pausanias and the present visible facts (assuming the identification), still persists among the inhabitants of Giannitsa, who perversely consider their village to be the site of the ancient Pherae. The fact is that the land here rises so sharply from the sea-level as to make any such theory untenable.

The identification of the Homeric Φηραί with the site of the castle at Kalamata is of such importance that it is necessary to emphasize the unanimity of Strabo and Pausanias, and the fact that their location of classical and Homeric Pherae agrees with the archaeological facts,

⁹¹ Strabo is presumably confusing the Homeric Ἰρή with the Ἰρή on the southern borders of Arcadia, which played such an important part in the Messenian Wars (Frazer, *op. cit.* vi (index to translation) 85, s.v. 'Ira'; iii. 415 ff.). Cf. also Hiller von Gaertringen and Lattermann, *Berliner Winkel-*

mannsprogramme ix (1911) 'Hira und Andania'.

⁹² Paus. iv. 30, 1.

⁹³ Forster 166.

⁹⁴ Strabo 360-1. Paus. iv. 30, 2-31, 1.

⁹⁵ *Op. cit.* 164-5.

and with the arguments of common sense. The conclusions reached in this article are largely based on this identification.

THE LAST THREE CITIES, Ἀνθεία, Αἵπεια, and Πήδαςος⁹⁶

In order to show the multiplicity of the ancient views as to the position of the last three cities Ἀνθεία, Αἵπεια, and Πήδαςος, I have set out the alternatives in diagrammatic form.

	<i>Alternatives given by Strabo's sources</i>			<i>Strabo's view</i>	<i>Pausanias' view</i>	<i>My own conclusions</i>
Καρδαμύλη ..	..	..	..	Kardamyle	Kardamyle	Kardamyle
Ἐνόπη ..	Pellana	'a place near Kardamyle'	Gerenia	Gerenia	Gerenia	Gerenia = Kambos
Ἴρῃ ..	Oechalia	Mesola	..	? Mesola	Abia	Probably in the Abia district
Φηραὶ ..	..	..	..	Pherae (Kalamata)	Pherae (Kalamata)	Pherae = Kalamata
*Ἀνθεία ..	..	Thouria	Asine (Korone)	?	Thouria	Thouria = either Αἵπεια or *Ἀνθεία, and of the two remaining cities one is probably at Karteroli
Αἵπεια ..	Thouria	Methone	..	? Thouria	Korone (Petalidhi)	
Πήδαςος ..	..	..	Korone (Petalidhi) (ΤΙΥΕΣ)	? Methone (φασί)	? Methone	

It is apparent that Strabo is following at least three conflicting sources, to which we may perhaps add a further, that of 'common opinion', usually marked by the use of the word φασί, while the other sources are usually denoted by οἱ μὲν or οἱ δέ. The existence of at least three sources is proved by the section about Ἐνόπη and the passage: Ἀνθειαν δὲ οἱ μὲν αὐτὴν τὴν Θουρίαν φασίν, Αἵπειαν δὲ τὴν Μεθώνην, οἱ δὲ τὴν μετὰ τὴν Ἀσίνην, τῶν Μεσσηνίων πολέων οἰκειότατα βαθύλειμον λεχθεῖσαν.... The conjecture Αἵπειαν <τε τὴν Κορώνην Πήδαςον> δὲ τὴν Μεθώνην⁹⁷ makes nonsense of the passage. Strabo has said above ἡ δ' Αἵπεια νῦν Θουρία καλεῖται and, since the tradition which says Ἀνθεία is Thouria is contradictory to this, it is necessary for him to tell us where this source placed Αἵπεια, but not to add any information about the site of Πήδαςος. Besides, this would make Strabo repeat himself about Πήδαςος, and we would expect him in this case to draw attention to the fact. The phrase ἥς πρὸς θαλάττῃ πόλις Κορώνη must be taken to mean 'to which belongs the city Korone near the sea', or 'whose city near the sea is Korone', and Müller⁹⁸ is wrong when he translates 'prope quam ad mare sita Corone urbs'. Strabo may well have been ignorant of the distance between Asine and Korone, or else he may simply have been following a source in an uncritical manner. Strabo's account of the position of the Seven Cities is often based on local rumours or book learning (as in the case of the identification of Ἴρῃ with Oechalia), and it is useless to try to rationalize the conflicting views which he

⁹⁶ Strabo 359-61; Paus. iv. 31, 1 (*Ἀνθεία); iv. 34-35 (Αἵπεια, Πήδαςος). For a more detailed discussion of Strabo's sources, see Jacoby, *FGH* ii. D 775 ff. For other ancient sources see *RE* s.v. Kardamyle, Enope, Hire, Phara, Antheia, Aipeia, Pedasos. I select the following as of interest: Schol. ad Ptol. iii. 16, 7 (possibly copying Strabo), of

Methone: "ταύτην Πήδαςον Ὀμηρος λέγει"; Steph. Byz. s.v. Γερηνία (Ἐνόπη) and s.v. Θούριοι (*Ἀνθεία); Pliny, *HN* iv. 5 (8): 'oppida Taenarum, Amyclae, Pherae, Leuctra, et intus Sparta, Therapnae, atque ubi fuerat Cardamyle, Pitane, Antheia, locus Thyrea, Gerania'.

⁹⁷ Valmin 211.

⁹⁸ *Strabonis Geographiconum Tabulae* xv (1877) 309.

quotes.⁹⁹ Pausanias places Αἴπεια at Korone (Petalidhi), which implies the existence of yet another conflicting tradition.

The Mycenaean remains at Thouria are sufficiently impressive to give it a strong claim, which is supported by the literary evidence, to be one of the Seven Cities, either Ἀνθεία or Αἴπεια. On the position of the two remaining cities the ancient traditions give conflicting answers, none of which is satisfactory. It is obvious that, by the time the local historians were beginning to busy themselves with giving their cities respectable ancestries, the original locations of the Seven Cities were forgotten. It seems improbable that the territory of the Cities would have included the promontory of Akritas, and we would expect the Mycenaean site (or sites) at Methone to have belonged rather to the kingdom of Pylos. Asine was a post-Mycenaean foundation (see above), and Korone (Petalidhi) may also have been. The only certain Mycenaean site yet discovered on the western side of the Messenian plain is at Karteroli. Here there are sufficient Mycenaean remains to indicate the existence of a substantial settlement, and I conjecture that this was one of the remaining two Cities.

Summary

All the Mycenaean sites relevant to the problem (with the exception of Methone) fall into the area which extends from Kardamyle on the south-east to Karteroli on the west, and the geographical centre of the group is at Kalamata (Φηραί). I conclude that Καρδαμύλη, Ἐνόπη, Ἴρή, Φηραί, and Ἀνθεία (or Αἴπεια) were situated at or near the modern Kardamyle, Kambos, Abia, Kalamata, and the site of the classical Thouria respectively, and that one of the two remaining Cities was at Karteroli. The position of the last City is still quite uncertain. It is possible that further Mycenaean sites exist to the north of Karteroli, on the west of the Messenian plain (perhaps there was one at Androussa, for instance),¹⁰⁰ but it is perhaps more natural to suppose that there was some basis for the ancient tradition which placed one of the Cities at Korone (Petalidhi). We can probably disregard the source of Strabo which placed Ἀνθεία at Asine, but the literary evidence for one of the Cities being at Korone is stronger. Pausanias says that its old name was Αἴπεια, while Strabo's source says it was Πήδασος. But there are no indications of Mycenaean occupation near Petalidhi. It is just possible that the last of the Cities may be found somewhere between Petalidhi and Messene (see above), since the country is not unsuitable for Mycenaean settlements.

The Seven Cities would then form a compact group, sufficiently near the sea to fit the Homeric description ἐγγὺς ἁλός. In all probability they comprised a small Mycenaean state, separated from Lacedaemon by Taygetus on the east, and from Pylos by a broad stretch of low mountains on the west. To the north the mountain of Ithome, and the band of hilly country (which was probably wooded in antiquity) extending from Valira on the south to Meligala on the north,¹⁰¹ separate the Seven Cities from the Mycenaean sites centred round Malthi-Dorion.¹⁰² To the south of Kardamyle the Mycenaean settlements at Leuktro and Koutiphari form a no man's land between the territory of the Seven Cities and Oetylus (see above). These settlements may

⁹⁹ As Valmin does (209): 'Strabon voulait les placer toutes près du golfe de Messénie, tandis que Pausanias les considère comme comprenant aussi la péninsule de l'Akritas.'

¹⁰⁰ Androussa castle was an important medieval centre, being the capital of the Messenian deme of Eva (for its history consult the Μεγάλη Ἑλληνική Ἐγκυκλοπαιδεία ('Αθήναι, 1927) s.v. Ἀνδρούσσα.

¹⁰¹ Valmin 64: 'La plaine inférieure est séparée de la plaine supérieure par une rangée de collines qui forment de l'Ithome jusqu'à Bala une sorte de seuil, communément

appelé "la colline de Skala". The Skala gap on the east of this range was controlled in classical times by the fort Tsoukaleika (Valmin 71-73). Here Valmin found sherds which 'seemed to be Mycenaean'. I doubt very much whether they were in fact Mycenaean. The site is wholly unsuitable for a Mycenaean settlement, being on a high and barren and very rocky hill. Potsherds of any kind were scarce on the site, as would not be surprising, if the place was only a small classical fort.

¹⁰² Valmin, *The Swedish Messenia Expedition* (Lund, 1938).

well have been independent,¹⁰³ but, if not, they would be more likely to have belonged to a Kingdom of the Seven Cities than to Lacedaemon. The Messenians claimed that both cities had originally belonged to Messenia.¹⁰⁴ The acropolis at Kardamyle is only 6 kilometres from the hill of Leuktro, connected with it by an easy coast road, and there is a firm boundary between Oetylus and the site at Koutiphari formed by the Langadha gorge.¹⁰⁵

The Mycenaean state would possess at least two good harbours, with beaches suitable for the drawing up of ancient ships, at Καρδαμύλη and Φηραί,¹⁰⁶ and possibly also another at Korone. By its nature the state would be maritime. Furthermore, it is possible that the marshy district at the south end of the Messenian plain, roughly the area bordered on the west by Messene and Karteroli, on the north by Aris and Thouria, and on the east by Asprochoma, was wholly or at least partly covered by sea in the Mycenaean period, which would make Thouria and Karteroli maritime settlements.

THE PRE-MYCENAEAN INHABITATION OF THE DISTRICT

As is to be expected in so fertile a district, there are, besides the Mycenaean settlements, several indications of earlier inhabitation round the shores of the Messenian Gulf. Neolithic objects have been found in the Kambos area, Neolithic or Early Helladic at Kardamyle, Early or Middle Helladic at Leuktro, and Early Helladic at Thouria and probably also at Kalamata (see above). All the finds, except those from the Neolithic caves near Kambos, were chance discoveries. A fuller survey of the area should reveal very considerable pre-Mycenaean inhabitation, and especially, I suspect, in the Early Helladic Period.

AN ATTEMPTED HISTORICAL RECONSTRUCTION

The Seven Cities may have been independent of the kingdoms of Nestor and Menelaus at the time of the Trojan War,¹⁰⁷ although some loose attachment to Pylos is suggested by the description “νεάται Πύλου ἡμαθόεντος”. νεάται in Homer has the root meaning of ‘lowest’,¹⁰⁸ but it can also mean ‘extreme’ or ‘outermost’.¹⁰⁹ Here it must be translated ‘on the border of’,¹¹⁰ rather than ‘on the outer part of’, since otherwise the meaning would be that the Seven Cities belonged to Nestor, and there would have been some protest when they were offered to Achilles. A connexion with Pylos is also suggested by the ancestry of the kings of Pherae from the river Alpheus.¹¹¹ The cities under Nestor and Menelaus in the Catalogue of Ships (which I assume to be in the main an authentic record, reflecting the political geography of Greece in the L.H. IIIB period¹¹²) do not include the territory in which I have located the Seven Cities. The nearest of the cities mentioned in the Catalogue, so far as can be known, are Dorion and Oetylus (see above).

The most important of the Seven Cities was Φηραί, the seat of the Ortilochus-Diocles dynasty.¹¹³

¹⁰³ Strabo (360) says that they were both founded by Pelops.

¹⁰⁴ Paus. iii. 26, 3, 6.

¹⁰⁵ BSA xi (1904-5) 124-5.

¹⁰⁶ Strabo 361: ‘πᾶσαι δ’ ἐγγὺς ἀλός’, Καρδαμύλη μὲν ἐπ’ αὐτῇ, Φαραὶ δ’ ἀπὸ πέντε σταδίων, ὕφορμον ἔχουσα Θερινόν, αἱ δ’ ἄλλαι ἀνωμάλοις κέχρηνται τοῖς ἀπὸ θαλάττης διαστήμασι.

¹⁰⁷ Ventris and Chadwick, *Documents in Mycenaean Greek* (1956) 145.

¹⁰⁸ *Il.* ii. 824, ‘the lowest foot of Ida’; v. 857, ‘the lowest part of his helmet’.

¹⁰⁹ *Il.* viii. 478, ‘the outermost bounds of the earth’; cf.

Od. vii. 127.

¹¹⁰ See LSJ s.v. Strabo 337 says that Homer called the whole of the country as far as Messene ‘Pylos’. This would agree roughly with the position of the border of Pylos that is implied here.

¹¹¹ *Il.* v. 541-60.

¹¹² T. W. Allen, op. cit.; V. Burr, *Neon Katalogos* (*Klio* Beiheft 49, 1944); G. L. Huxley, *Mycenaean Decline and the Homeric Catalogue of Ships* (University of London Institute of Classical Studies, Bulletin no. 3, 1956) 19-30.

¹¹³ *Il.* v. 541-60; *Od.* iii. 487-90 = xv. 185-8 (Telemachus’ visits to Φηραί).

Diocles, the father of Crethon and Ortilochus, who were both killed in the War, was the son of Ortilochus, son of the river Alpheus.¹¹⁴ In the *Odyssey*¹¹⁵ the story is told of the meeting of Odysseus and Iphitus, the son of Eurytus, before the War at the house of Ortilochus in Φηραί (Eurytus had another son, Thalpius, who fought in the War).¹¹⁶ If this Ortilochus was the one who died in the War, and was the father of the Diocles who entertained Telemachus at Φηραί, we have Homeric evidence of at least four generations of kings at Φηραί, and this would mean that the city was founded at least two generations before the War. There is no reason to regard the story of the meeting of Odysseus and Iphitus at Φηραί (the only reference to Messenia in Homer) as an anachronistic later insertion in the *Odyssey*.¹¹⁷ Both because of its central position, and because it is the only one of the Seven Cities which has any history attached to it in the *Iliad* and the *Odyssey*, Φηραί is marked out as the capital city. Telemachus stayed there not only because it was the logical place for the night halt on the way between Pylos and Sparta, but also because princely etiquette and the laws of hospitality demanded it, i.e. because it was the seat of the most important king in the district. The epithet ζᾶθεος,¹¹⁸ meaning 'divine' or 'sacred', suggests that Φηραί was also the religious centre, as one would expect of the capital.

There was, then, at the time of the Trojan War, a small Mycenaean state, with its capital at Pherae, midway between Sparta and Pylos, and possibly independent of both, a kind of 'buffer state', of minor importance because its territory was geographically limited to a small area, since expansion was precluded by the existence of more powerful neighbours. After the death of Crethon and Ortilochus in the War, the kingdom may have been temporarily taken over by Agamemnon during the minority of Diocles. This would explain the tradition of Agamemnon's ownership of the Seven Cities. We may compare the way in which Nestor is said to have taken over the kingdom which belonged to the house of Aphareus.¹¹⁹

After the end of the War, according to Strabo,¹²⁰ the Neleids of Pylos occupied some Laconian territory in Messenia, which may indicate an infiltration into the region of the Seven Cities. If Strabo is right, we must presumably suppose that Agamemnon had handed over the cities to Menelaus after the end of the War. But Pausanias¹²¹ says that Nestor took over the kingdom of Messenia, all except that part which was subject to the sons of Asclepius; and the Asclepiadae were traditionally the rulers of Gerenia, and were connected with both Gerenia and Pherae.¹²² Possibly the accounts of Strabo and Pausanias may be reconciled if we assume that there was, in fact, only a peaceful domination by the Pylians, perhaps merely an act of co-ordination with the rulers of Φηραί, in order to carry out a project of mutual defence. An occasion for this would be the period when Pylos appears, from the evidence of the Linear B tablets, to be organizing her territory to meet an external military threat.

There is no clear evidence from the Linear B tablets as to the eastward extent of the kingdom of Pylos at this time. The Pylians apparently had some measure of control over the whole extent of the west coast of the Peloponnese from as far north as Phea to Cape Akritas on the south,¹²³ and had organized an 'early warning system'¹²⁴ for its defence by posting men at

¹¹⁴ Paus. iv. 30, 2.

¹¹⁵ xxi. 13-41.

¹¹⁶ *Il.* ii. 620.

¹¹⁷ The arguments of Victor Bérard are weak (Bérard, *Introduction à l'Odyssée* i (1933) 283-7, and *Ithaque et la Grèce des Achéens* i (1935) 188-9), especially the topographical argument, which depends on the location of the Homeric Φηραί at Aliphera, a town in Arcadia (Paus. viii. 26, 5-7; 27, 4, 7). This identification cannot now be maintained in view of the excavations of Professor Blegen at Ano Englianos (McDonald in *AJA* xlv (1942) 541-3). The fact that certain words in this passage occur only once in Homer (ἐπιστορεᾶ

and ξεινοσύνης προσκηδῆος) or at most twice (ἐξείσιν and παιδῶν) is not in itself a sufficient argument for invalidating the passage, which has a genuine ring.

¹¹⁸ *Il.* ix. 151.

¹¹⁹ Paus. iv. 3, 1.

¹²⁰ Strabo 359; cf. 353, 364, 367-8.

¹²¹ Loc. cit.

¹²² Paus. iii. 26, 9 (Gerenia); iv. 3, 2 (Gerenia and Pherae), 3, 9 and 30, 3 (Pherae); cf. also 30, 1 (the temple of Asclepius at Abia—see n. 52 above).

¹²³ If we accept the hypothesis put forward by Palmer (*Minos* iv (1956) 120-45).

¹²⁴ Op. cit. 124.

selected look-out posts along the coast. There are indications that Pylos was also interested in the territory of the Seven Cities, although the evidence here is not so strong. If the current explanation of *ne-do-wo-ta-de* is right,¹²⁵ the influence of Pylos had reached as far east as the river Nedon. But there is not sufficient evidence from the tablets to reach any conclusions with regard to the military organization (if any) in this district; and we must remember, in any case, that the places selected for the guard-posts need not bear any relationship to the actual Mycenaean settlements in the regions concerned, since the names themselves may be of tribes or districts, or even of prominent geographical features.¹²⁶

Pausanias says¹²⁷ that after the end of the Trojan War, the homecoming of Nestor, and his subsequent death, the Dorian expedition and the Return of the Heraclidae, which took place two generations later, drove the descendants of Neleus out of Messenia. If we place the Trojan War towards the end of the L.H. IIIB period,¹²⁸ there is an approximate synchronization between the Return of the Heraclidae and the archaeological date for the fall of Pylos.¹²⁹

CONCLUSION

The early Mycenaean (L.H. I-II) finds from Sotirianika and Kambos indicate that the city of Ἐνόπη (and possibly also that of Ἴρη) was flourishing early in the Mycenaean Period, and it is likely that the same is true of Φηραί and of the city at Thouria (Ἀνθεία or Αἰπεία). The Seven Cities as a whole probably reached the height of their prosperity in the L.H. IIIB period, before the Trojan War, as in the rest of the Mycenaean world. After the War they were apparently under the influence of Pylos, and they presumably suffered the same destruction as Pylos in the L.H. IIIC period.

I suggest that the territory of the Seven Cities comprised the original Mycenaean kingdom of Messene.¹³⁰ The name Μεσσήνη belongs etymologically to the class of 'Pre-Greek' place names ending in -ήνη, which are associated by philologists with those ending in -νθ- and -σσ-.¹³¹ The fact that there are no known Mycenaean sites in the Upper Messenian plain (the Stenyclerus), and that the sites centred round Malthi-Dorion would belong, with it, to the kingdom of Pylos, appears to indicate that the Homeric (i.e. Mycenaean) Messene extended no farther than the territory of the Seven Cities.¹³²

We may detect in Pausanias' semi-mythological account of the origins of Messenia sources reflecting the history of Messenia before the Trojan War as well as after it. The story of the foundation after the War of a palace at Andania in Stenyclerus may have become mixed with an older tradition of the settlement of the district, 'previously uninhabited', by Polycaon, son of Lelex, with a force from Argos and Lacedaemon.¹³³ Since the tradition of Lelex, the first king in Laconia, appears to be of great antiquity, and is in fact mainly mythological, it is possible that

¹²⁵ Op. cit. 141; Ventris and Chadwick, op. cit. 144 and 194. The conjecture 'Phoraphi (Φαρά?)' is weak, since the Homeric spelling is Φηραί (op. cit. 186).

¹²⁶ e.g. *Ne-da-wa* (Palmer, op. cit. 134) and *o-ka-ra*, (ibid. 135).

Various attempts have been made to locate some of the names on the tablets in the area of the Seven Cities. These attempts are unsatisfactory because they are not systematic; e.g. *E-re-e*, 'the obvious place is the seaward end of the Messenian plain' (Ventris and Chadwick, op. cit. 143). But a location near the Osmanaga lagoon would be equally plausible. The identification of *Pe-to-no* (Ruipérez, *Études mycéniennes* (1956) 118) involves an odd substitution of a

letter. For *Sa-ma-ra* (Ruipérez, op. cit. 118), see n. 75 above on the derivation of the name Samarina. One is reminded of *Ba-lu/o-ga-sa-ra-n* (Hrozný, *Les Inscriptions crétoises* (1949) 25).

¹²⁸ Huxley, op. cit. 25, 27.

¹²⁹ Blegen, *AJA* lxi (1957) 133.

¹³⁰ *Od.* xxi. 15.

¹³¹ Blegen, in *Athenian Studies presented to W. S. Ferguson* (1940) 2. Cf. Nilsson, *The Minoan-Mycenaean Religion* (1950) 489-90.

¹³² Nilsson, *The Mycenaean Origin of Greek Mythology* (1932) 80: 'The upper plain is as yet devoid of Mycenaean remains.'

¹³³ Paus. iv. 1, 1-3, 3.

we have here some faint memory of the first Mycenaean settlement of Messenia. The story of Aphareus, and his connexions with the Lacedaemonian Tyndareus (king of Pellana); the founding of Arene, one of the Pylian cities in the Catalogue of Ships; and the fight over the oxen between the sons of Aphareus and their cousins the Dioscuri,¹³⁴ all seem to reflect dim memories of the period before the Trojan War. The 'sons of Asclepius who went to Troy' were said to have been Messenians;¹³⁵ which may be another indication of the antiquity of the name Messene, and of its connexion with Pherae and with Gerenia, where the Asclepiadae were located in legend.¹³⁶ This accords well with the story of the meeting of Odysseus and Iphitus at Φηραί:¹³⁷

τὼ δ' ἐν Μεσσήνῃ συμβλήτην ἀλλήλοιν
οἴκῳ ἐν Ὀρτιλόχοιο.

R. HOPE SIMPSON

¹³⁴ Paus. iii. 26, 2.

¹³⁵ Paus. iv. 3, 2.

¹³⁶ See n. 122 above.

¹³⁷ *Od.* xxi. 15-16.

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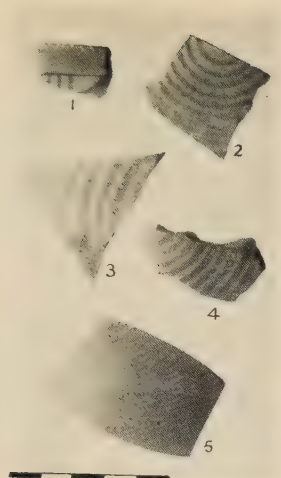
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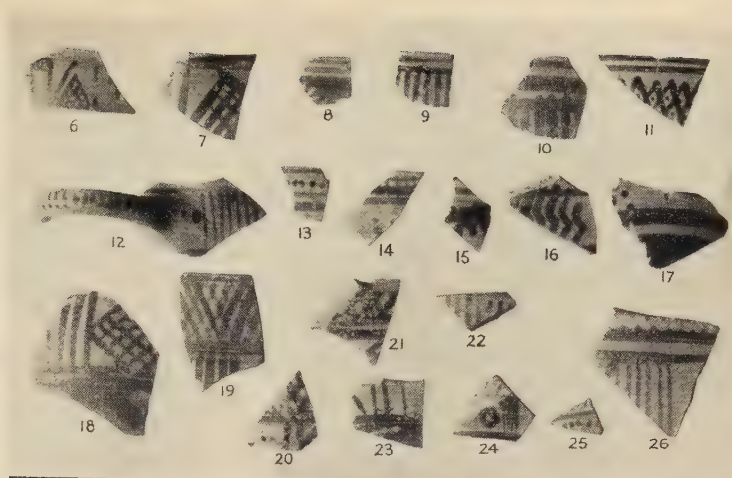
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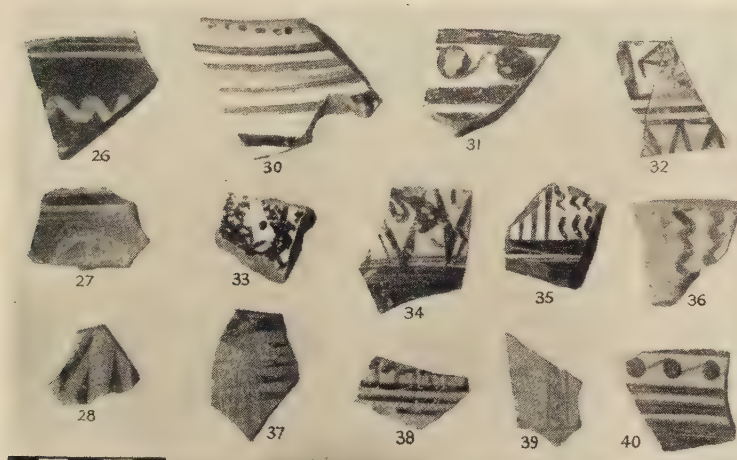
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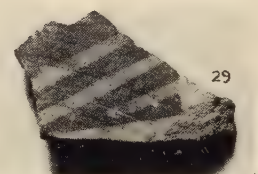
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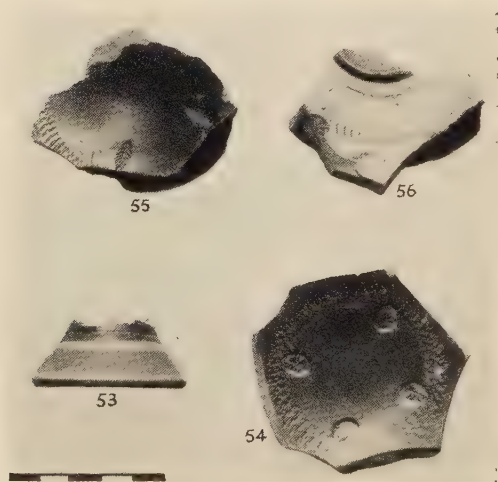
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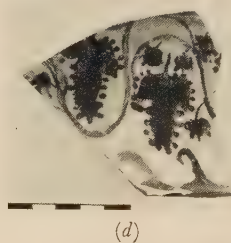
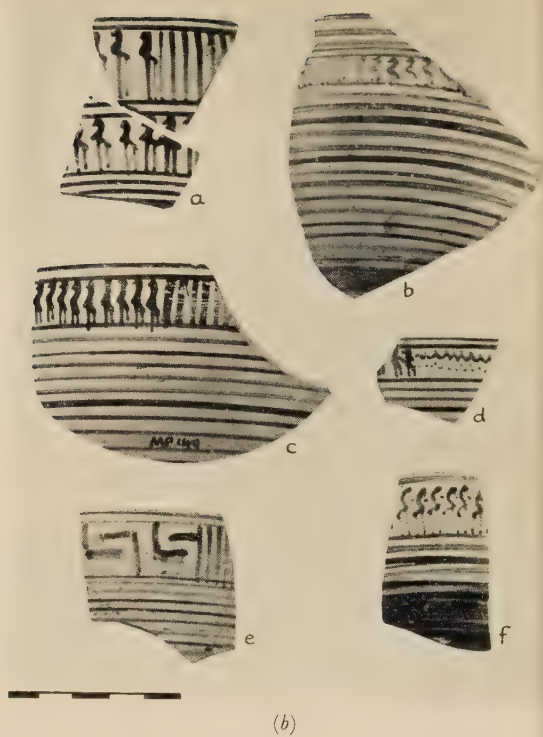
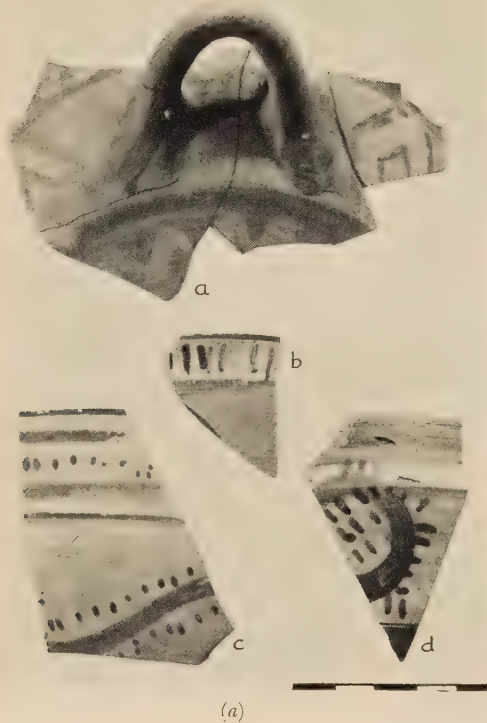


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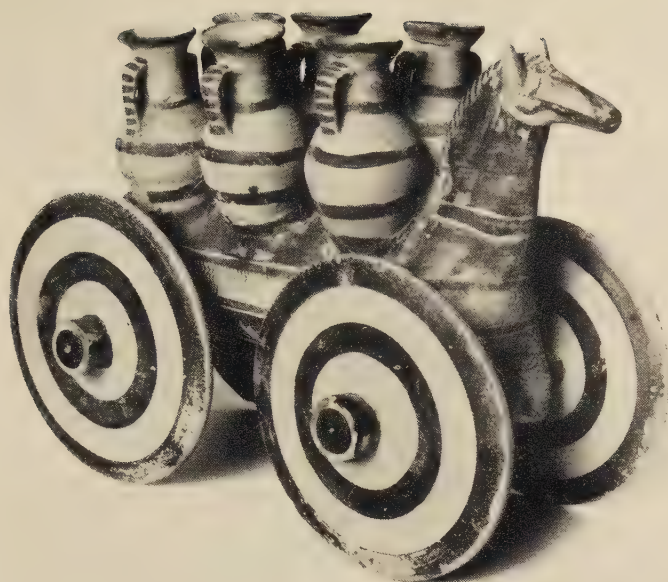


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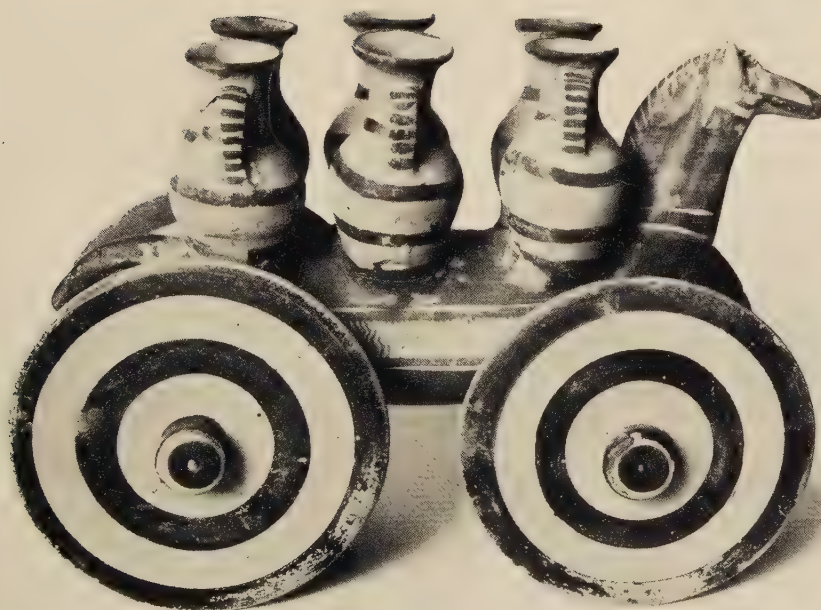
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(d) FROM CHALCIS.

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(e) ATHENS NM 16306.

(c) ATHENS NM 135.
(f) ATHENS NM 2244.



(a)



(b)

EARLY EUBOEAN POTTERY
ATHENS NM 14481.



(a)



(b)

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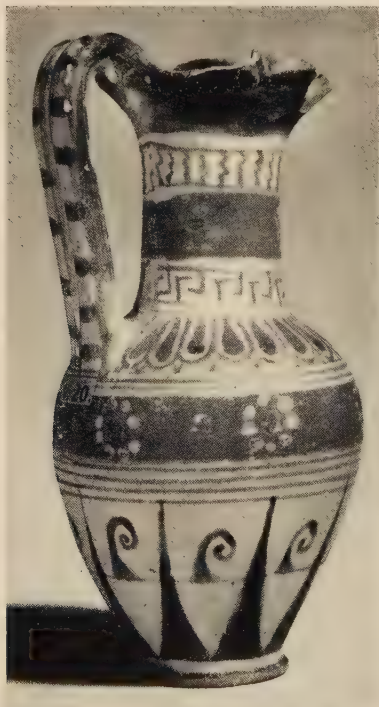
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(a)



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(d) LONDON BM 1929.7-15.1.



(a)



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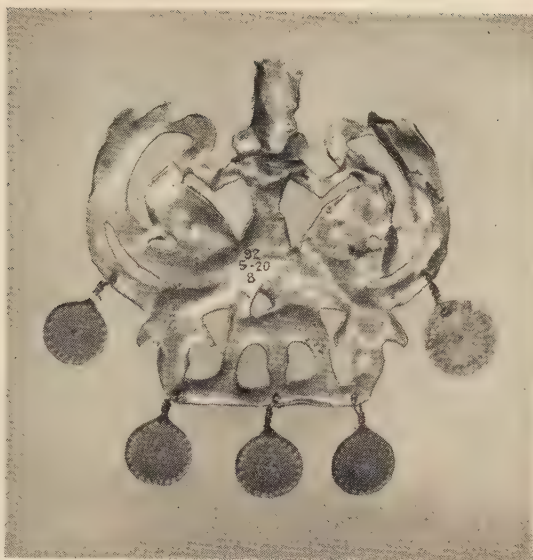


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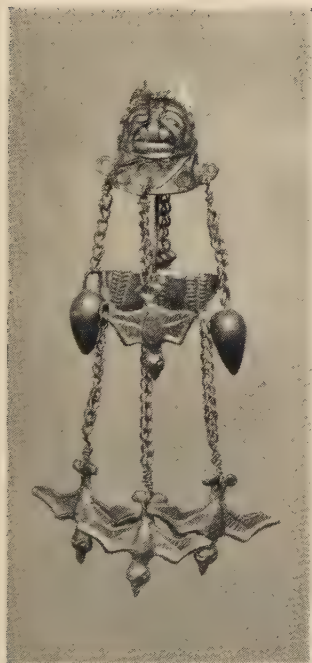
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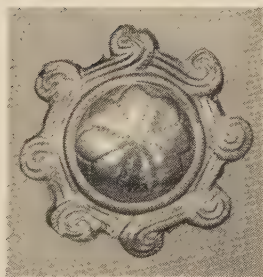
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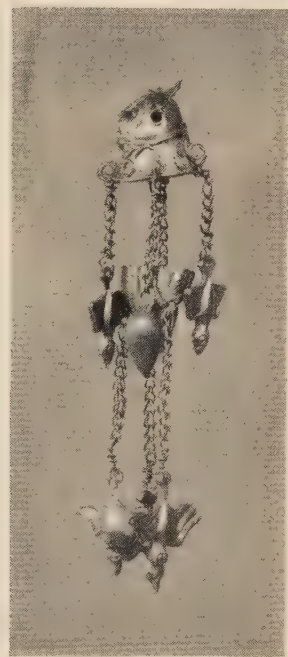
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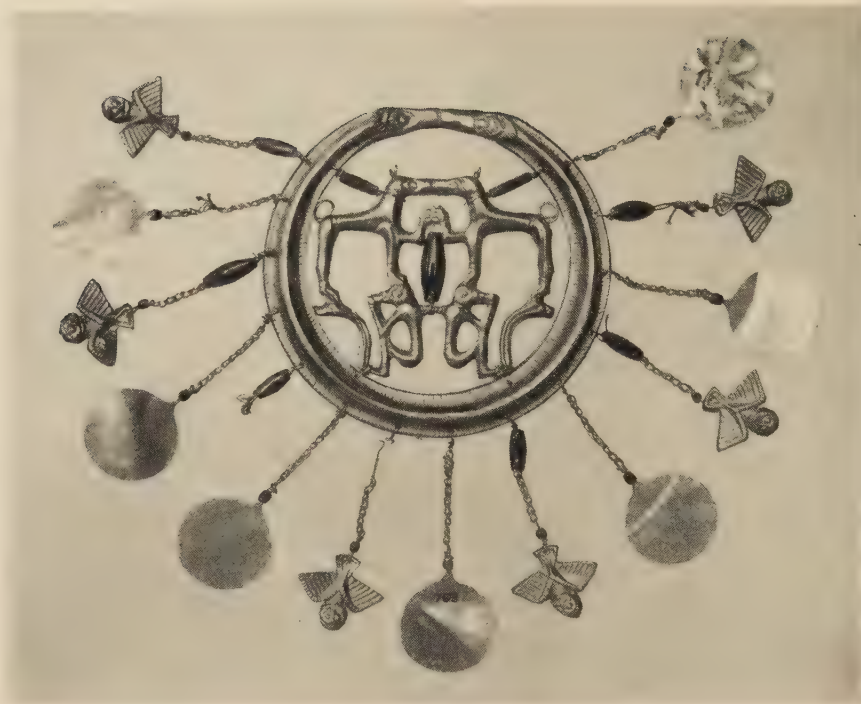
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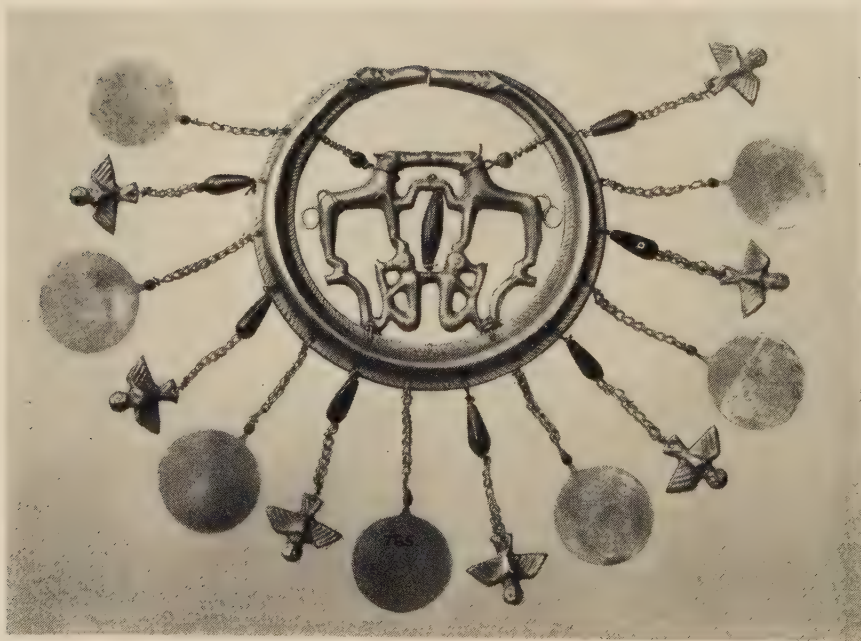
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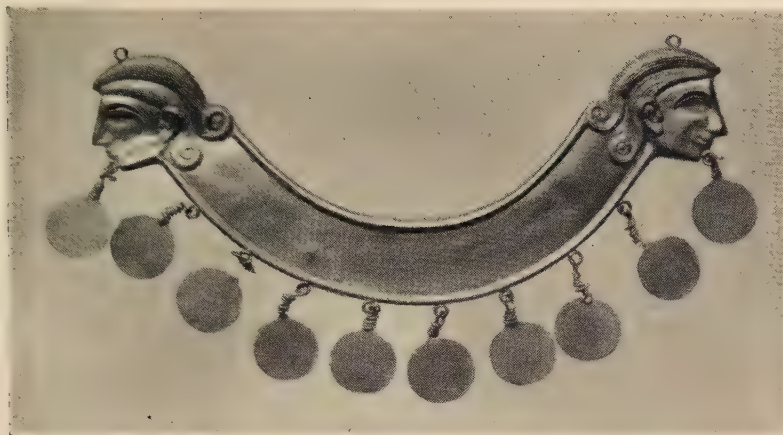
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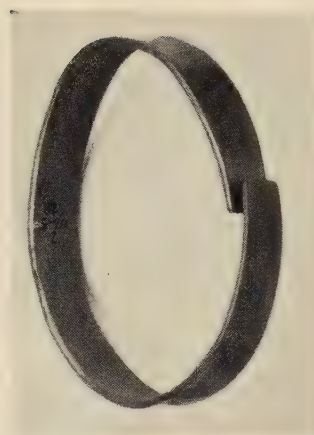
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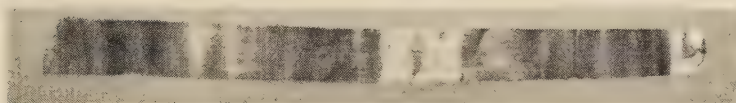
(a) BM NO. 763. (b) BM NO. 765.



(a)



(b)



(c)



(d)



(e)



(f)

THE AEGINA TREASURE RECONSIDERED

(a) BM NO. 761. (b) BM NO. 767. (c) BM NO. 690 (PART). (d) BM NO. 756A. (e) BM RINGS NOS. 888 (TOP), 693 (CENTRE, L.), 692 (CENTRE, R.), 691 (BOTTOM, L.); 690 (BOTTOM, R.). (f) BM NO. 751.



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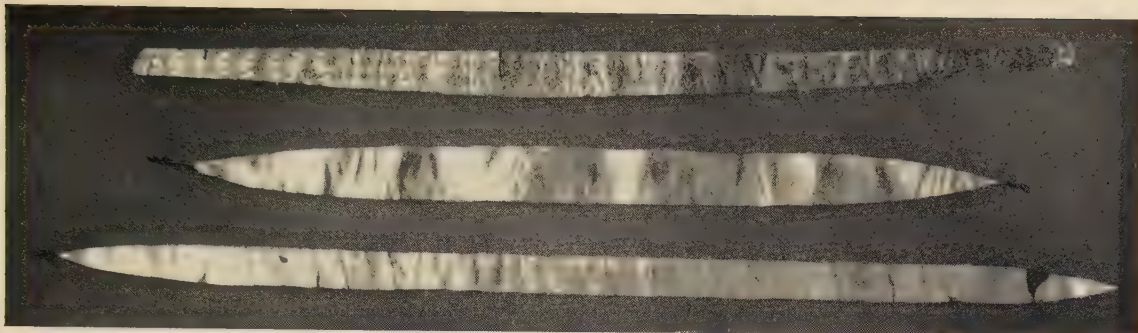
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(a) BM no. 759A. (b) BM no. 758A. (c) BM no. 760A.



(a)



(b)

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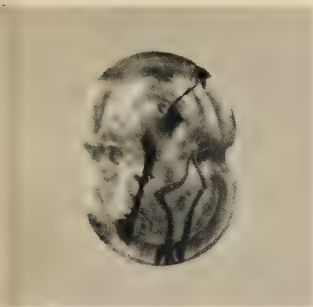
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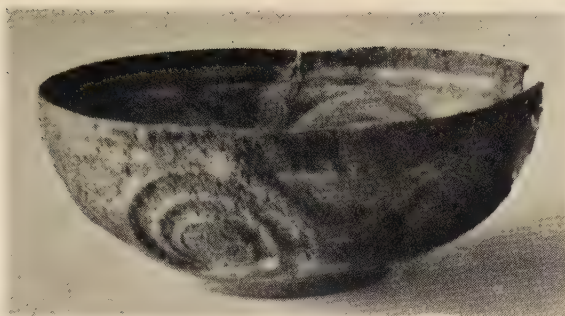
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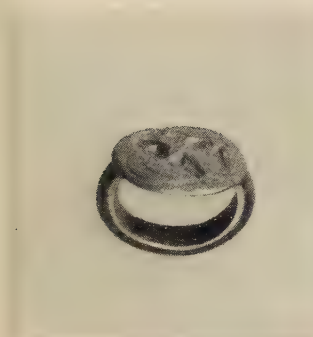
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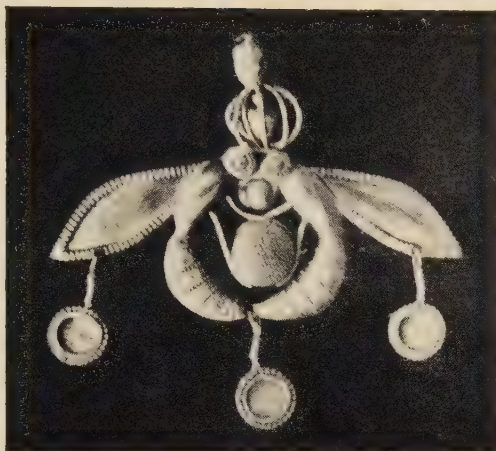
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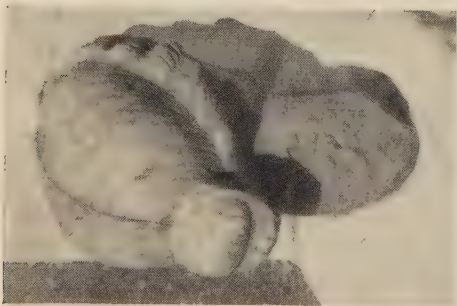
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(i)

THE AEGINA TREASURE RECONSIDERED: COMPARISONS

(a) BM 1952.5-6.2. (b) FROM KNOSSOS. (c) FROM MALLIA. (d) BM RINGS NO. 14. (e, f) FROM CHRYSOLAKKOS.
(g) BM NO. 817. (h) BM NO. 815. (i) BM NO. 816.

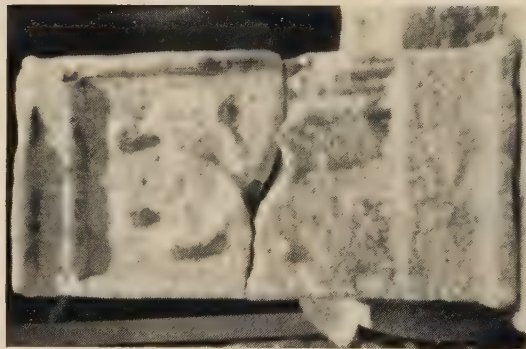


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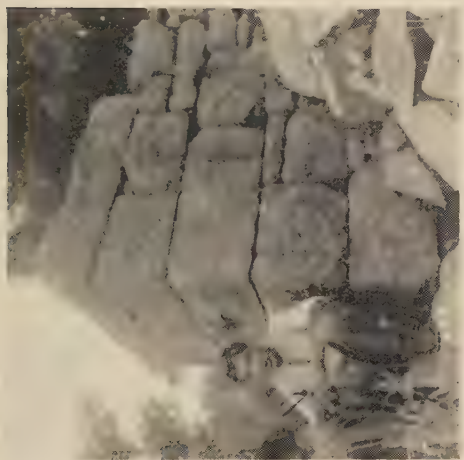
(e)

CARIAN COAST III
ANTIQUITIES OF THE RHODIAN PERAEA.

(a, b) IN MARMARIS. (c) AT KARACA. (d, e) AT DURAN ÇİFTLİK.



(a)



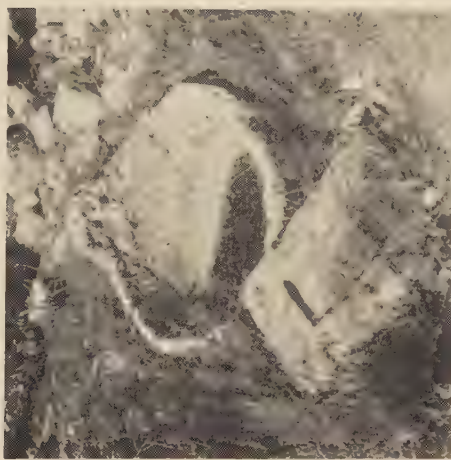
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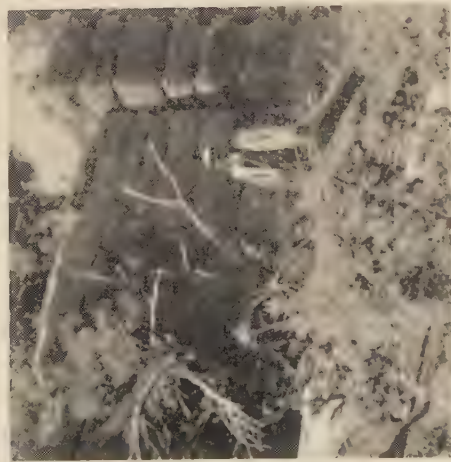
(c)



(d)

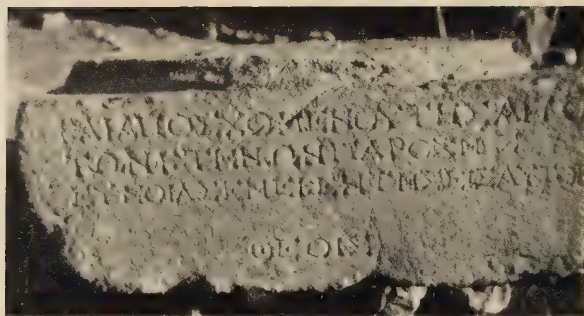


(e)

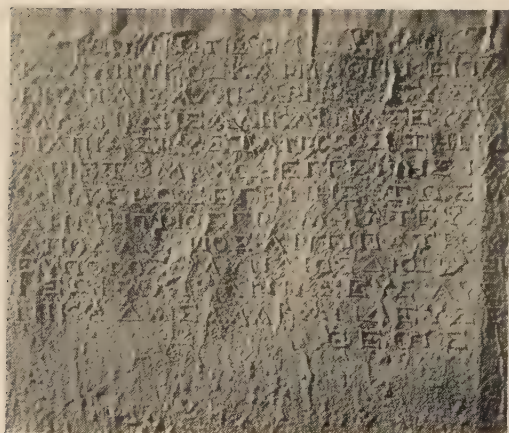


(f)

CARIAN COAST III
SITES OF THE RHODIAN PERAEA.
(c) GELIBOLU, KONA KIVI. (d, e) ÇETİBELİ ASARI. (f) FERİK.



(a)



(b)



(c)



(d)

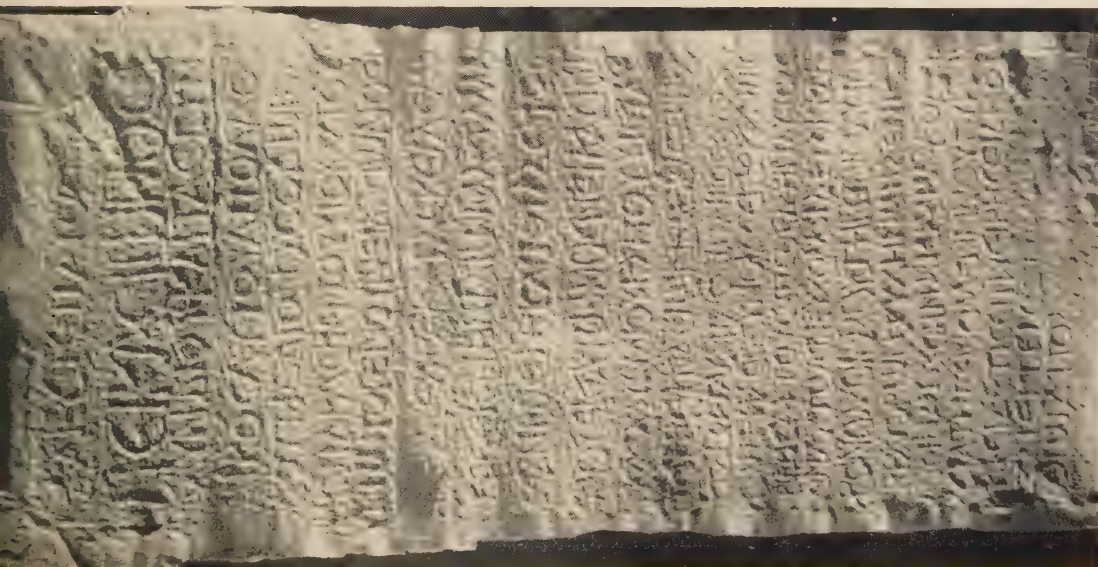


(e)

CARIAN COAST III

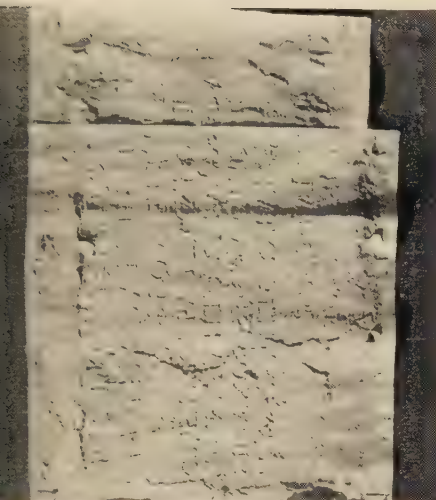
TOMBS AND INSCRIPTIONS OF THE SUBJECT PERAEA.

(a, b) INSCRIPTIONS OF IDYMA. (NOS. 12 AND 11). (c-e) CLASSICAL TOMBS AT ÇAMKÖY.



(a)

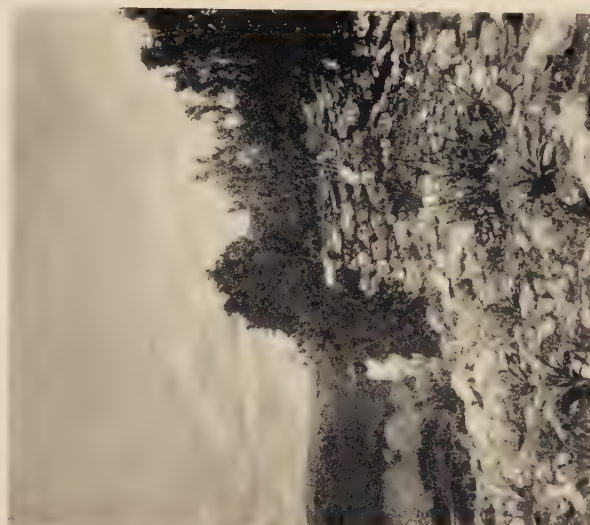
(a) INSCRIPTION OF CEDREAE (NO. 6).



(b)

SITES AND INSCRIPTIONS OF THE RHODIAN PERAEA.

(b) INSCRIPTION OF IDYMA (NO. 10).

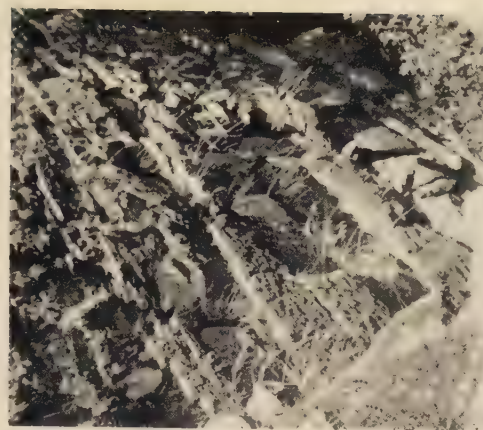


(c)

(c) KIZILIYAKA ASARI.



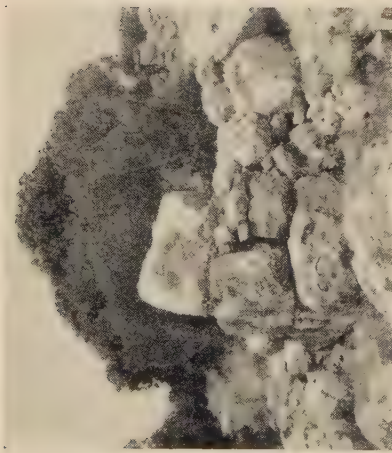
(d)



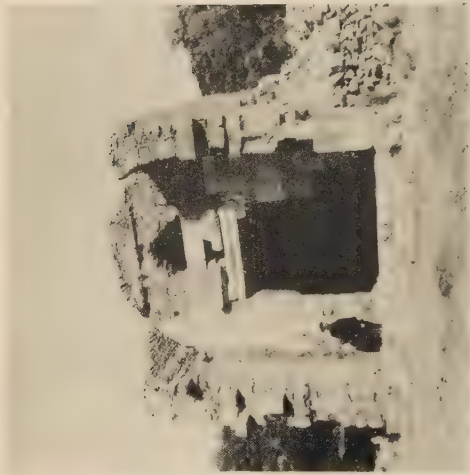
(e)

(d, e) ELMALI KALESİ.

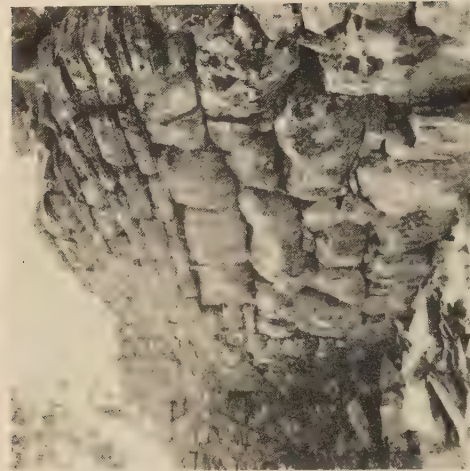
CARIAN COAST III



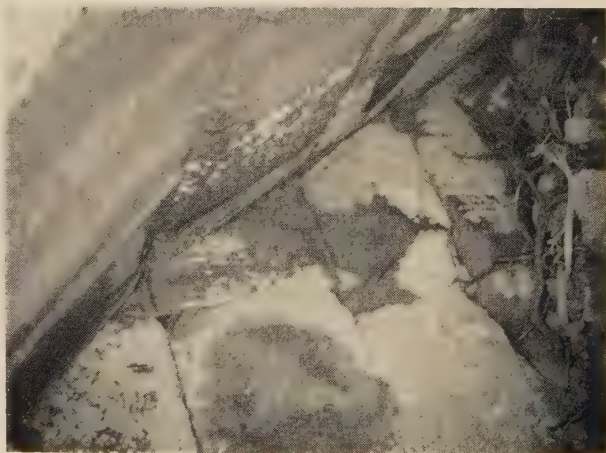
(a)



(b)



(c)



(d)



(e)



(f)

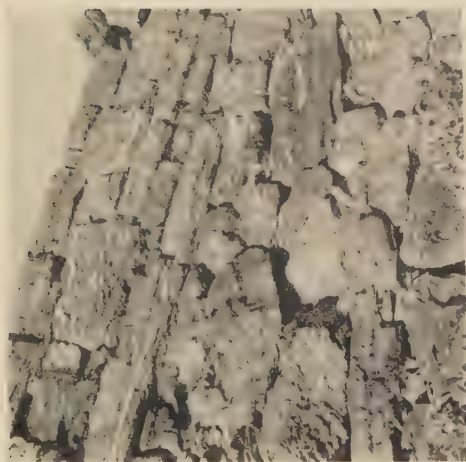
CARIAN COAST III

ANCIENT REMAINS OF THE HALICARNASSUS PENINSULA.

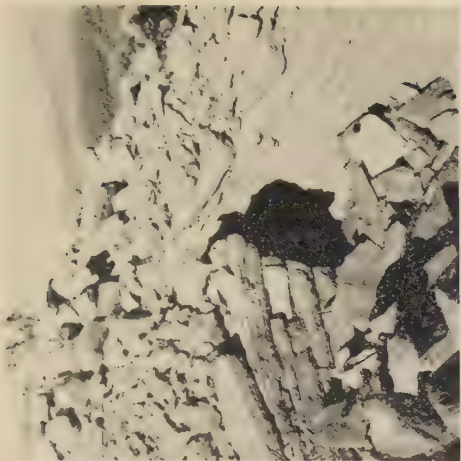
(a) KONEK ADA. (b) TORBA, MAUSOLEUM. (c) ALAZEYIN (d) ASARLIK, CHAMBER TOMB. (e, f) KIZILAGAC, FORT AND COMPOUND TUMULUS.



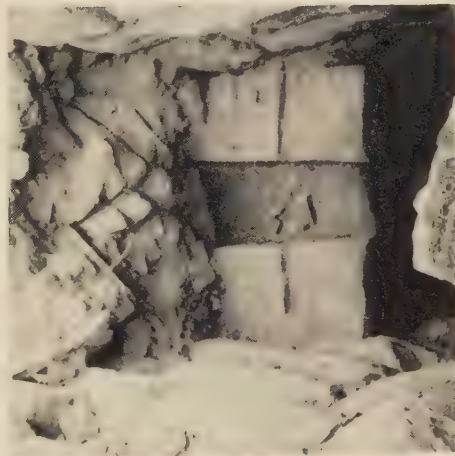
(a)



(b)



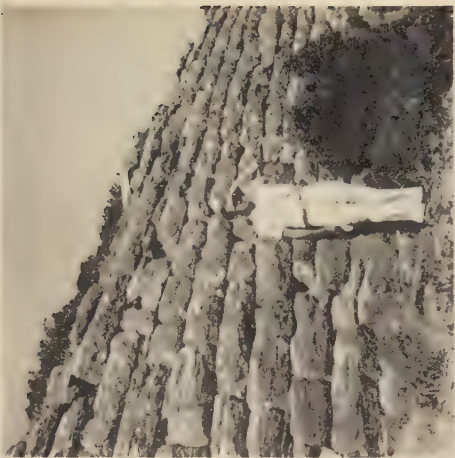
(c)



(d)



(e)



(f)

CARIAN COAST III
TITHANGLA.

- a. WALL NEAR MAIN GATE. (b) WALL AT E. (c, d) ENTRANCE TO TETRAPYRGON. (e) WALL Z. (f) BUILDING Q.



(a)



(b)



(c)



(d)



(e)



(f)

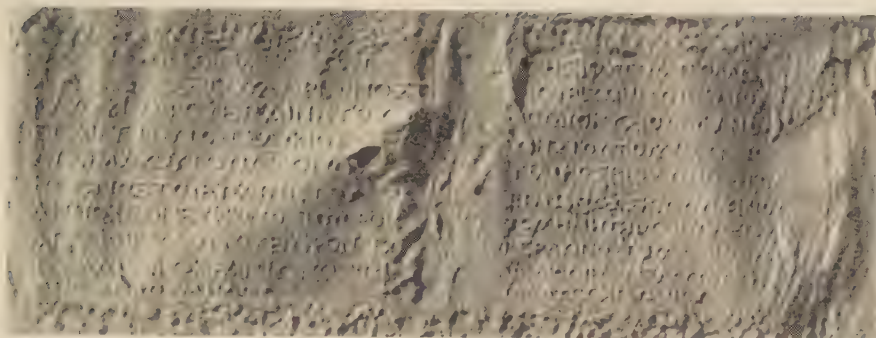
CARIAN COAST III

SITES OF THE GULF OF IASUS.

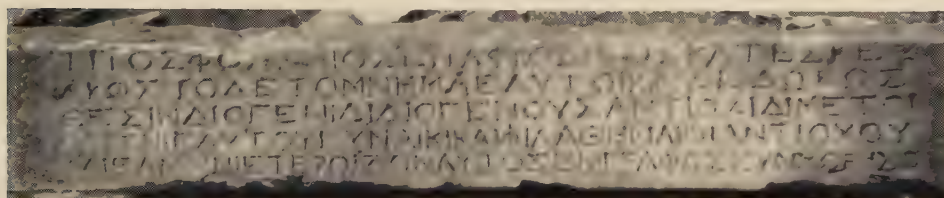
(a) BARGYLIA. (b) SALIHADASI. (c) SIĞIRTMAÇ KALESİ (CINDYA). (d) IASUS, LANDWARD FORTIFICATION.
(e, f) KAZIKLI (TEICHUSSA).



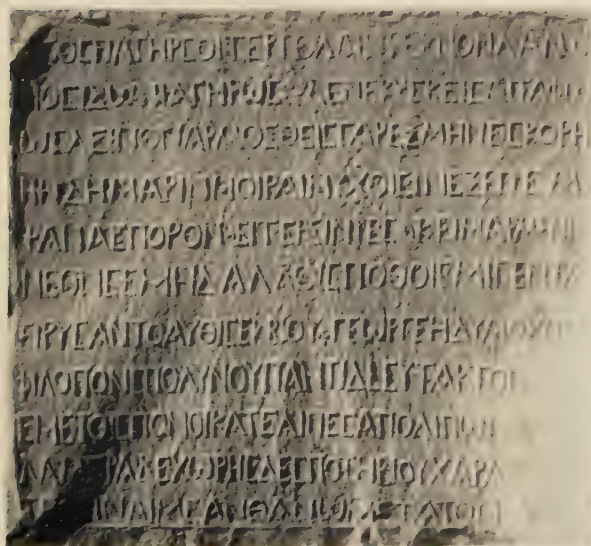
(a)



(b)



(c)



(d)



(e)

CARIAN COAST III

WEST CARIAN COINS AND INSCRIPTIONS OF THE COAST.

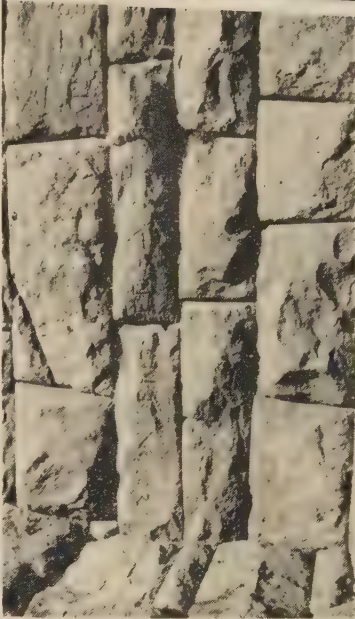
(a) COINS OF SYANGELA (?). (b, c) INSCRIPTIONS OF IASUS (NOS. 1 AND 4). (d, e) INSCRIPTIONS OF TEICHIUSSA (NOS. 5 AND 12).



(c)



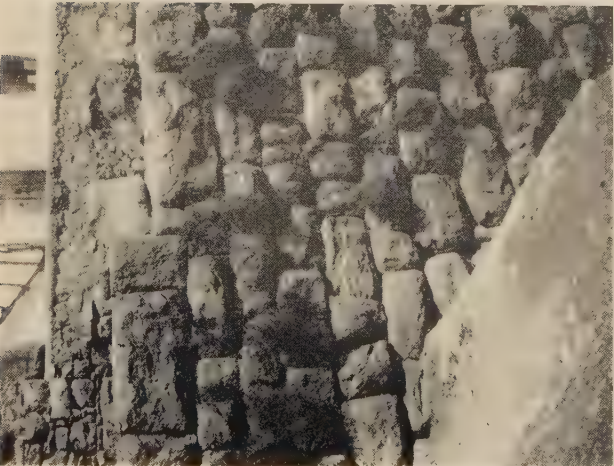
(d)



(d)



(a)



CARIAN COAST III
FORTIFICATIONS OF TELOS AND NISYROS.
(a) TELOS, (b-d) NISYROS.



(a)



(c)



(b)

CARIAN COAST III
KOS ASTYPALAIA.

(a) VIEW OF SITE FROM NORTH. (b) SURFACE POTTERY. (c) CITADEL OR TERRACE WALL.



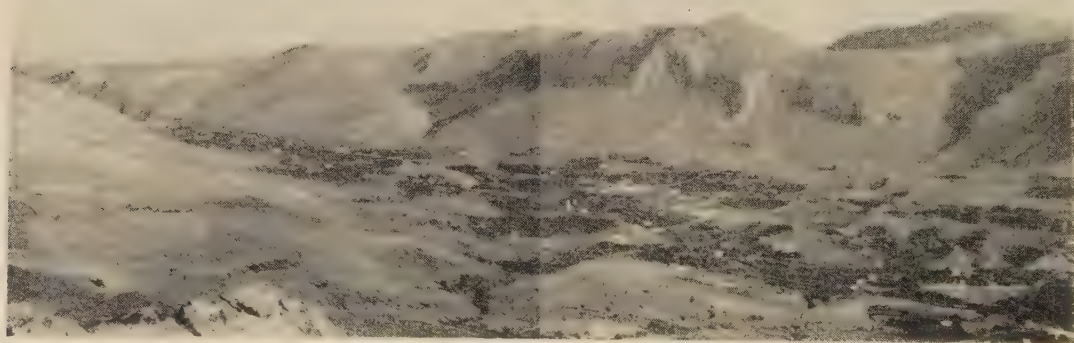
(a)



(b)



(c)



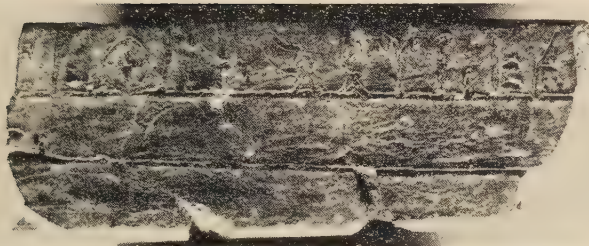
(d)

CARIAN COAST III
LIPSOI AND KALYMNOS.

(a) LIPSOI, VIEW TO NORTH-WEST FROM CITADEL. (b, c) KALYMNOS, EMBOLAS, AND KASTELLAS. (d) KALYMNOS, VIEW OF VATHY FROM KASTELLAS.



S 8100



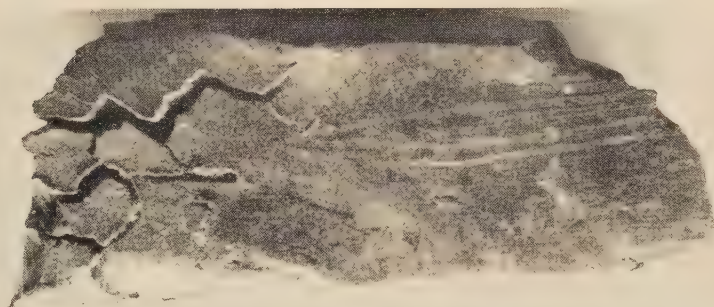
X 8101



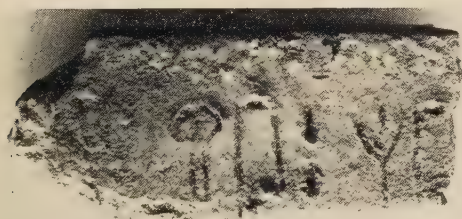
Og8102



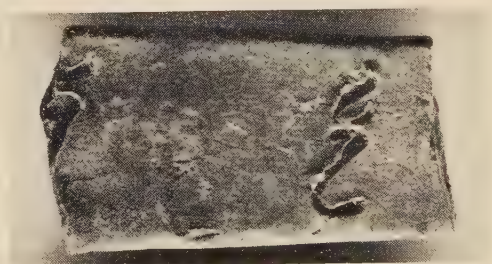
X 8108



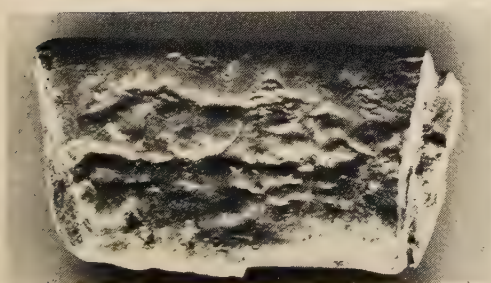
X 8104



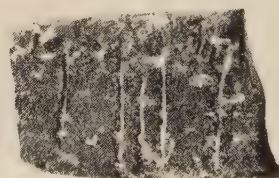
X 8105



X 8106



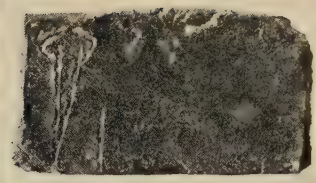
X 8107



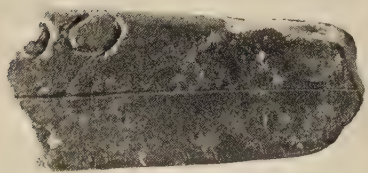
D 8103



X 8109



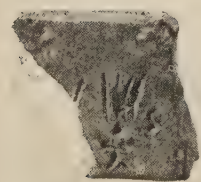
X 8110



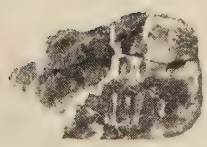
X 8111



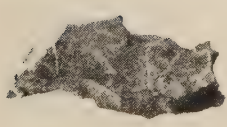
X 8112



X 8113



X 8114

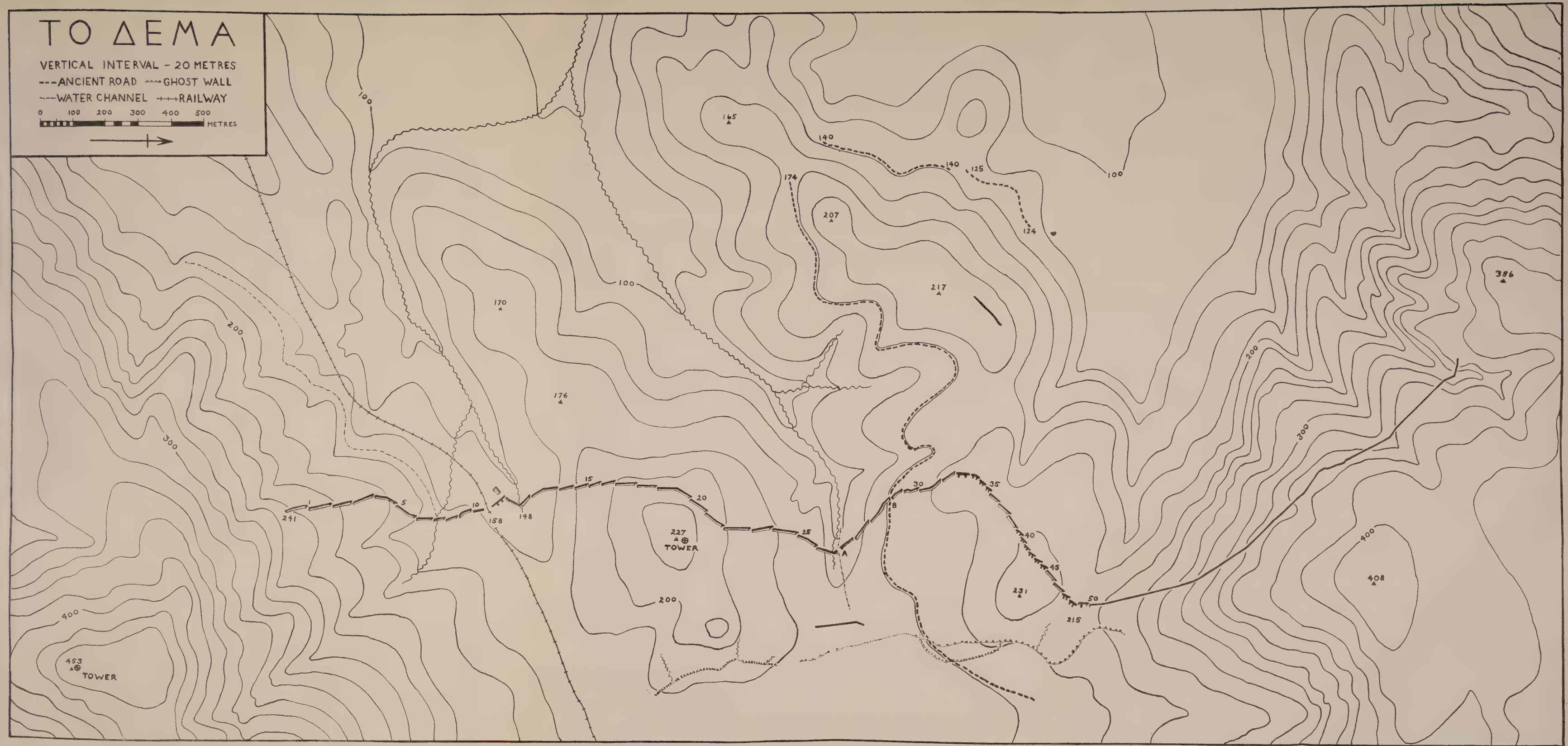


X 8115



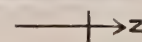
K 740

LINEAR B TABLETS FROM KNOSSOS



THE DEMA

MAP OF THE AIGALEOS-PARNES GAP (BASED ON CURTIUS AND KIEPERT, KARTEN VON ATTIKA VI)



THE DEMA

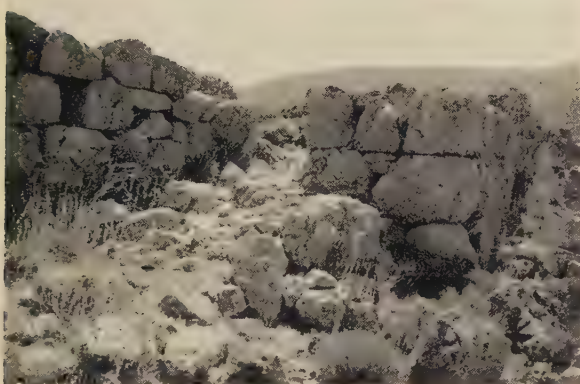
AERIAL VIEW OF THE AIGALEOS-PARNES GAP (BY COURTESY OF THE ROYAL HELLENIC AIR FORCE).



(a)



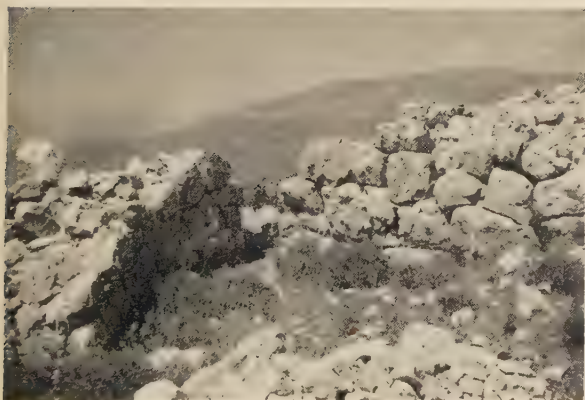
(b)



(c)



(d)



(e)



(f)

THE DEMA

(a) SOUTH SECTOR, WELL-PRESERVED WALLING (SECTION 48-49). (b) NORTH SECTOR, POOR WALLING ON PARNES (AT 1560 M. NORTH OF THE NORTH SADDLE). (c) NARROW STYLE, A BUTT-END (SALLYPORT 29, EXTERNAL VIEW LOOKING SOUTH). (d) BROAD STYLE, A BUTT-END (SALLYPORT 34, INTERNAL VIEW LOOKING NORTH). (e) NARROW STYLE, SALLYPORT WITH FUNNEL EXIT, INTERNAL VIEW (SALLYPORT 16). (f) THE SAME, EXTERNAL VIEW.



(b)

(a) BROAD STYLE, AN INDIVIDUAL RAMP.
(SECTION 15-16).



(a)

THE DEMA

(b) NARROW WALLING, SHOWING (FROM R.) PARAPET, WALL-WALK, REAR EDGE OF RAMPART, AND (BEYOND) RUBBLE RAMP
(c) NARROW STYLE BUTT-END WITH DRAFTED EDGE (SALLYPORT 5, EXTERNAL VIEW LOOKING SOUTH).



(c)



(a)



(b)



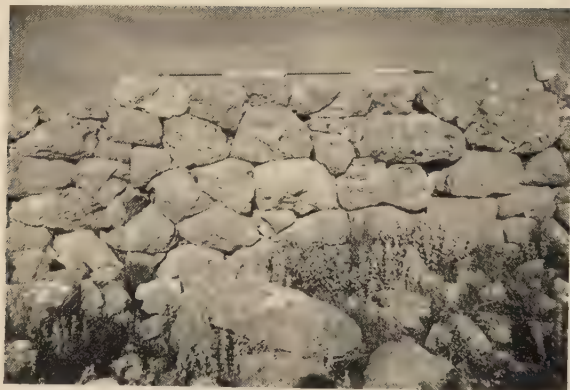
(c)



(d)

THE DEMA

(a) BROAD WALLING WITH INDIVIDUAL RAMP AT REAR (SECTION 34-35). (b) NARROW STYLE, LEVELLED WALK AND PARAPET (SECTION 28-B). (c) MASSIVE BOULDER CONSTRUCTION (SECTION SOUTH END -1). (d) WELL-CUT MASONRY (SECTION 9-10).



(a)



(b)



(c)



(d)



(e)



(f)

THE DEMA

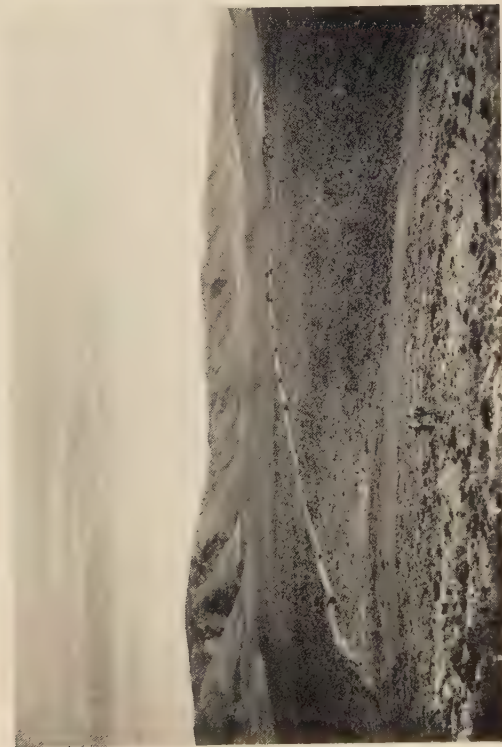
(a) LESBIAN MASONRY STYLE (SECTION 49-50). (b) POLYGONAL MASONRY STYLE (SECTION 2-3). (c) RECTANGULAR BLOCKS IN COURSED SERIES (SECTION 25-26). (d) COURSING FOLLOWING THE NATURAL SLOPE (SECTION 1-2). (e) COURSING AT BUTT-ENDS (SECTION 36-37, SALLYPORT 37). (f) RECTANGULAR AND TRAPEZOIDAL BLOCKS (SECTION A-27).



(a)



(b)



(c)



(d)

THE DEMA

(a) MASONRY WITH LEVELLED EDGES AND SQUARED CORNERS (SECTION 2-3). (b) RANDOM RUBBLE WITH STACKS AND FILLERS (SECTION 15-16). (c) SALIENT OVER THE NORTH HILL: VIEW LOOKING SOUTH FROM PARNES TOWARDS THE EASTERN SUMMIT (452 m.) OF AIGALEOS. (d) ROUND TOWER ON THE SUMMIT (452 m.) OF AIGALEOS: VIEW OF NORTH SIDE OF CIRCULAR BASE.



MYCENAE
PREHISTORIC CEMETERY. NEOLITHIC(?) POTTERY.



a



b



c



d



e



MYCENAE

PALACE, BELOW NORTH TERRACE. (a) FAIENCE CYLINDER, IMPRESSION. (b) FAIENCE CYLINDER.
(c) CURVILINEAR TRIANGLE, GOLD. (d) POMEGRANATE BUD, GOLD. (e) ARGONAUT ORNAMENT, GOLD.



(a)



(b)



(c)



(d)

MYCENAE

FAIENCE CYLINDERS. (a) MYCENAE, PALACE, BELOW NORTH TERRACE: DRAWING (3 : 2). (b) MYCENAE, TOMB 517 (1 : 1).
(c) KNOSSOS, TOMB 66. (d) BEISAN.



MYCENAE
VOTIVE STELE



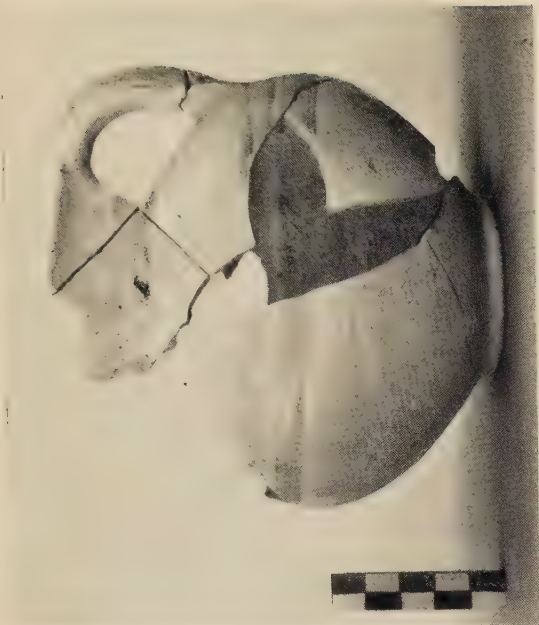
(a)

MYCENAE
PREHISTORIC CEMETERY. (a) DEPOSIT OF POTTERY IN SITU.

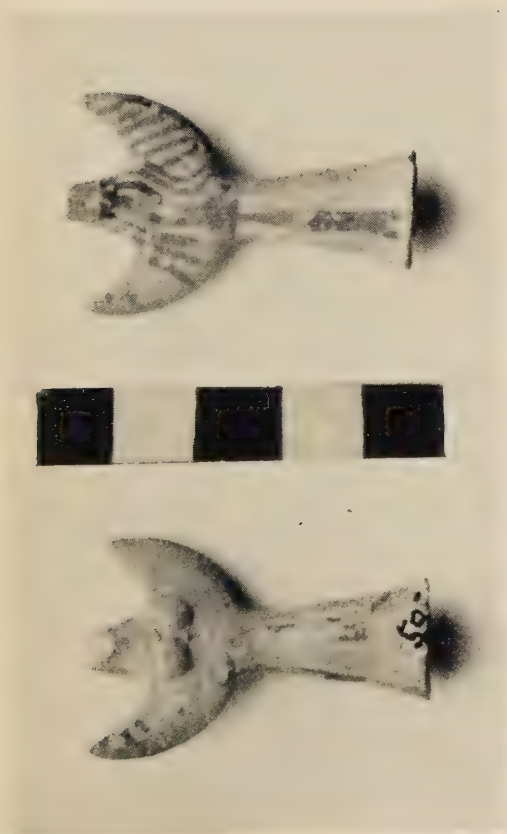


(b)

(b) IVORY SHIELD, FRONT AND BACK (SCALE CA. 4:5).



(b)



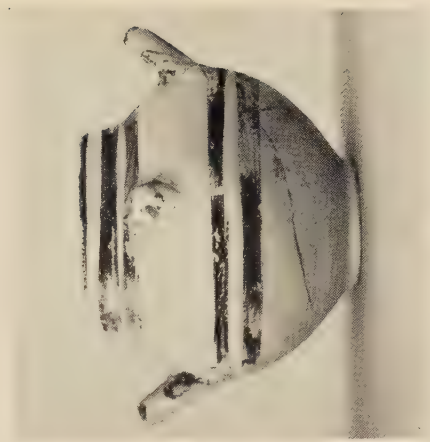
(a)



(c)



(d)



(e)

MYCENAE

PREHISTORIC CEMETERY. (a) TERRA-COTTA FIGURINE, FRONT AND BACK. (b) AMPHORA. (c) L. H. IIIB STIRRUP JAR. (d) L. H. IIIB MUG. (e) GLOBULAR JAR (H. 0'-3"-M.).

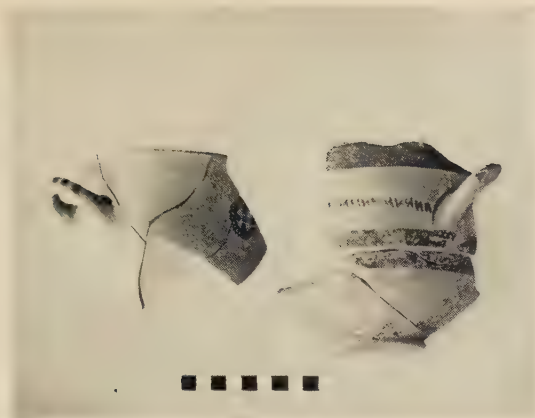


(a)



(b)

MYCENAE
 PREHISTORIC CEMETERY. (a) Two JUGS. (b) GENERAL SHERDS.



(a)



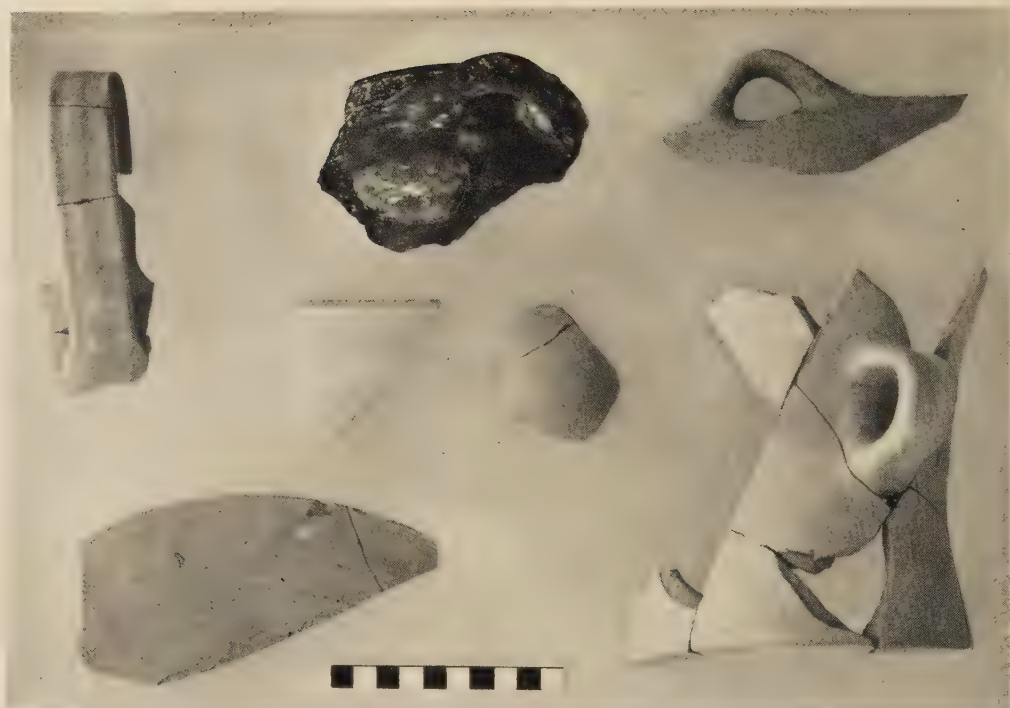
(b)



(c)

MYCENAE

PREHISTORIC CEMETERY. (a) TWO DEEP BOWLS. (b) COARSE WARE. (c) SHERDS FROM DEEP BOWLS, MAINLY OF PANELLED STYLE.



(a)



(b)

MYCENAE

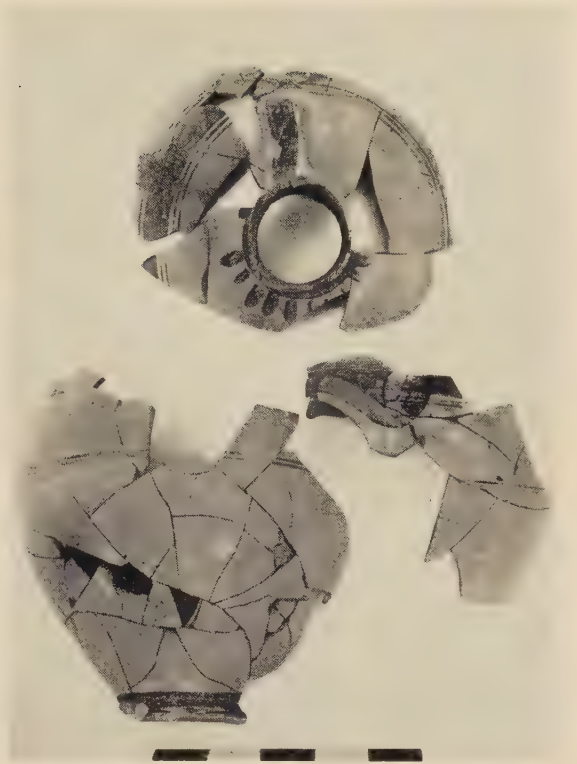
PREHISTORIC CEMETERY. (a) UNPAINTED WARE. (b) DOMESTIC BASIN.



(a)



(b)



(d)



(c)

A HELLENIC TOWER AT KNOSSOS

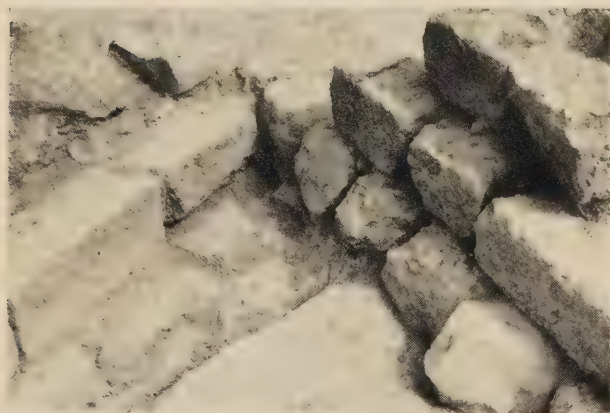
(a) THE TOWER LOOKING NORTH DOWN KAIRATOS VALLEY. (b) NORTH CURTAIN WALL LOOKING WEST FROM TOWER, AFTER FILL REMOVED. (c) EAST EDGE OF TOWER FOUNDATIONS. (d) HYDRIA 2 FROM SOUTH INNER EDGE OF NORTH CURTAIN WALL.



(a)



(c)



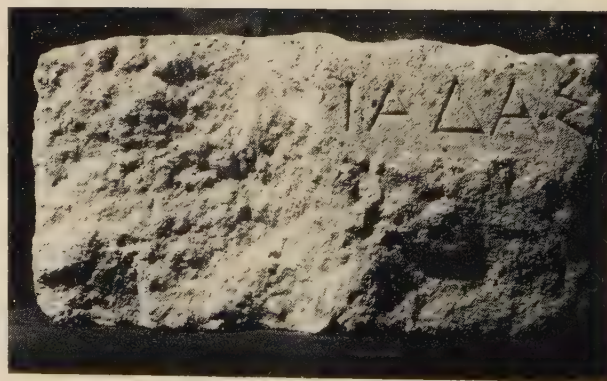
(b)



(d)



(e)



(f)

A HELLENIC TOWER AT KNOSSOS

(a) NORTH CURTAIN WALL LOOKING EAST TOWARDS TOWER, WITH REMAINS OF STONE FILL. (b) NORTH OUTSIDE EDGE OF NORTH CURTAIN WALL AT POINT OF JUNCTION WITH TOWER. (c) BLOCK WITH DRAFTED MARGINS AND LIFTING BOSS IN TOWER FOUNDATIONS. (d) TOWER LOOKING SOUTH, WITH FILL OF LOWEST COURSE OF TOWER WALL IN FOREGROUND, PAVEMENT INSIDE TOWER BEHIND. (e) INSCRIPTION (I) BUILT INTO TOWER FOUNDATIONS. (f) INSCRIPTION (I).



(a)



(b)

IDENTIFYING A MYCENAEAN STATE

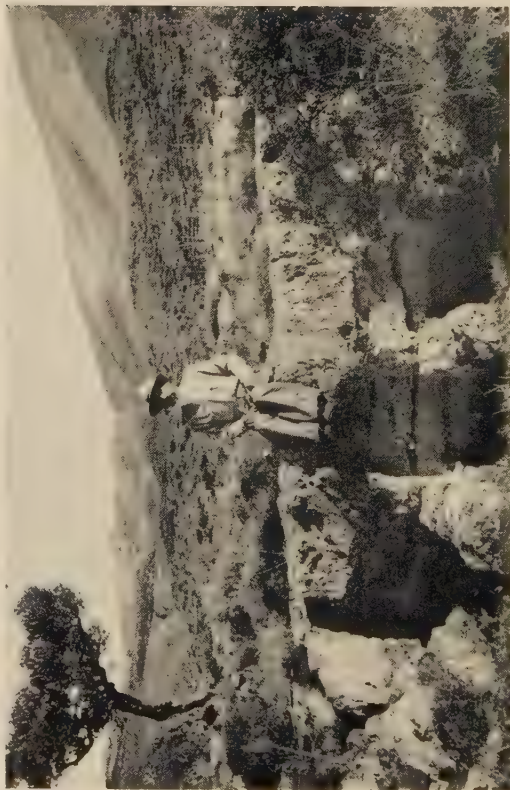
(a) THE ACROPOLIS AT LEUKTRO, FROM THE NORTH. (b) KARDAMYLE CITADEL FROM THE WEST.



(a)



(b)



(c)



(d)

IDENTIFYING A MYCENAEAN STATE

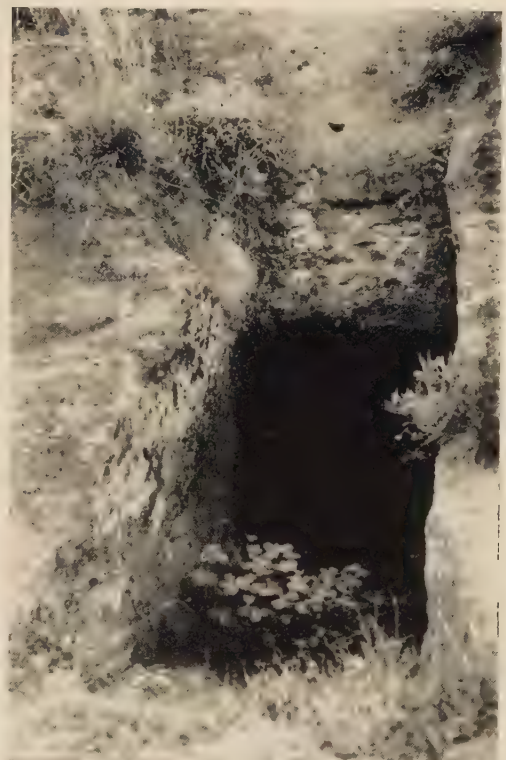
KARDAMYLE: ROCK-CUT CHAMBER ON CITADEL (FROM WEST). (b) KARDAMYLE: 'TOMB OF THE DIOSCURI' (FROM WEST).
(c) EAST OF KARDAMYLE: TRIPLE ROCK-CUT TOMB (FROM WEST-NORTH-WEST). (d) KAMBOS: THOLOS TOMB, DOORWAY (FROM INTERIOR).



(a)



(b)



(c)

IDENTIFYING A MYCENAEAN STATE

- (a) KALAMATA CASTLE FROM NORTH-WEST, WITH THE BED OF THE RIVER NEDON IN FOREGROUND. (b) THOURIA: CHAMBER TOMB NO. 2 FROM THE EAST. (c) KARTEROLI: CHAMBER TOMB NO. 2, FROM NORTH-EAST.



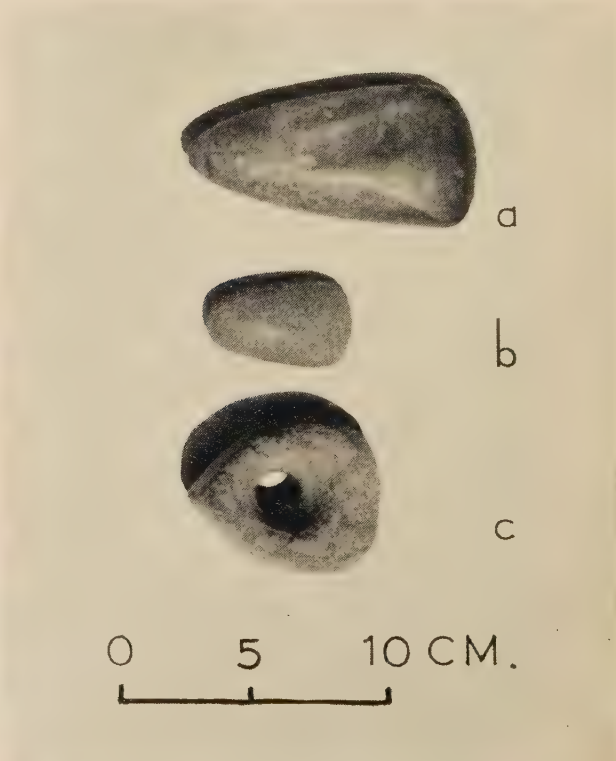
(a)



(b)



(c)



(d)

IDENTIFYING A MYCENAEAN STATE

(a) KOUTIPHARI: CLAY FIGURINE. (b) THOURIA: EARLY HELLADIC 'FIGURINE'. (c) GIANNITSA: POLYGONAL WALLING (FROM NORTH-EAST). (d) a, b: KARDAMYLE, CELTS ATTRIBUTED TO THIS AREA. c: BORED CELT FROM LEUKTRO.



